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COMMONWEALTH BUREAU OF CENSUS AND STATISTICS,  
CANBERRA.

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OFFICIAL

# YEAR BOOK

OF THE

# COMMONWEALTH OF AUSTRALIA

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No. 45—1959.

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Prepared under Instructions from  
The Right Honorable the Treasurer.

BY

S. R. CARVER,  
COMMONWEALTH STATISTICIAN.



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## PREFACE.

By the Constitution of the Commonwealth of Australia, the Parliament of the Commonwealth is empowered, subject to the Constitution, "to make laws for the peace, order, and good government of the Commonwealth, with respect to . . . . . Census and statistics." In the exercise of the power so conferred, a "Census and Statistics Act" was passed in 1905, and in the year following the "Commonwealth Bureau of Census and Statistics" was created. The first Official Year Book was published early in 1908. The publication here presented is the forty-fifth Official Year Book issued under the authority of the Commonwealth Government.

The Synopsis on pp. xi to xxxi following shows the general arrangement of the work. The special index (preceding the General Index) provided at the end of the volume, together with certain references given in the various chapters, will assist in tracing in previous issues special articles and other more or less important miscellaneous matter which, owing to limitations of space, have been omitted or abbreviated in the present volume. Where, in the General Index, more than one reference to a subject is given, the chief reference (or references) has been specially indicated wherever possible.

Every endeavour has been made to meet the demand occasioned by the current economic and financial conditions for new information, or information expressed in new terms, concerning many branches of statistics, while a Diary of Principal Economic Events of the years 1955 to 1958 is inserted after the last chapter.

It is not proposed to refer to the whole of the new matter or to the new treatment of existing matter incorporated in the present volume, but attention may be drawn to the following:—

The order of chapters has been revised for this issue, Chapters VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, and XVIII of this issue corresponding, respectively, to chapters VII, VIII, IX, XVI, XVII, XVIII, VI, X, XI, XII, XIII, XIV, and XV of Year Book No. 44.

Chapter II.—Physiography.—Special article on Droughts (p. 51).

Chapter V.—The Territories of Australia.—New section dealing with Christmas Island (p. 147).

Chapter VIII.—Water Conservation and Irrigation.—Special Series of Maps of Water Supply and Irrigation Areas (pp. 257–63).

Chapter X.—Vital Statistics.—Life Tables published in detail (p. 347).

Chapter XV.—Education.—New sections relating to the Commonwealth Literary Fund (p. 598) and the Australian Academy of Science (p. 608).

Chapter XXIV.—Farmyard, Dairy, and Bee Products.—Revision of Section dealing with Dairy Cattle and Dairy Products.

Appendix.—Basic Wage Inquiry, 1959.—Precis of judgment (p. 1173).

The material in the Year Book has been carefully checked throughout, but I shall be grateful to those who will be kind enough to point out defects or make suggestions.

In a publication of this size, a considerable time must necessarily elapse between the handling, both by author and printer, of the earlier and later parts of the work. In order to offset, to some extent, the consequent delay in presentation, the contents of this issue have already been published in separate Parts as the successive chapters or groups of chapters were printed. Particulars of these Parts, numbering eleven in all, are shown in the Price List of Printed Publications at the end of this volume. In a statistical publication, however, the time element does result in an unevenness in the periods to which the statistics relate. To overcome this difficulty, in part at least, an Appendix is provided in which, so far as space permits, later particulars, where available, of many statistical series appearing in preceding chapters have been inserted. The insertions have been restricted mainly to figures, as the inclusion of current textual matter is not generally practicable.

In a number of chapters the figures in this issue have been brought forward two years from those in the previous issue. The Appendix to this issue contains information for various periods up to 1958–59.

It should be pointed out that for the most recent statistics the reader should refer to other publications issued by this Bureau, notably the *Monthly Review of Business Statistics* and the *Quarterly Summary of Australian Statistics*. There are also numerous mimeographed statements issued from time to time on a wide range of subjects. Particulars of these are shown in Chapter XXXI.—Statistical Organization and Sources of Information.

My thanks are tendered to the Statisticians in each State, who have collected and compiled the data on which a great part of the information given in the Official Year Book is based. Thanks are also tendered to the responsible officers of the various Commonwealth and State Departments, and to others who have kindly, and often at considerable trouble, supplied information.

I also desire to express my keen appreciation of the valuable work performed by Mr. A. E. Callander, Editor of Publications, Mr. E. H. Harry, B.A., B.Com., and Mr. S. Burton, B.A., Assistant Editors, and the other officers of the Publications Division, and of the services rendered by the officers in charge of the several Branches of the Commonwealth Bureau of Census and Statistics upon whom has devolved the duty of revising the chapters relative to their respective Branches.

S. R. CARVER,  
Commonwealth Statistician.

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS,  
Canberra, A.C.T., August, 1959.

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# OFFICIAL YEAR BOOK

OF THE

## COMMONWEALTH OF AUSTRALIA.

### CHAPTER I.

#### DISCOVERY, COLONIZATION AND FEDERATION OF AUSTRALIA.

##### § 1. Early Knowledge and Discovery of Australia.

1. **Introduction.**—The following paragraphs contain only a bare outline of the more important facts relating to the early history of Australian discovery. A more detailed summary of these facts may be found in Official Year Book No. 39 (*see* page 1) and earlier issues.

2. **Terra Australis.**—There was, apparently, an early Chaldean tradition as to the existence of an Austral land to the south of India and rumours to that effect found their way in the course of time to Europe. References to this *Terra Australis* are found in the works of Ælianus (A.D. 205–234), Manilius (probably a contemporary of Augustus or Tiberius Caesar), and Ptolemy (A.D. 107–161). Evidence pointing to knowledge of such a land appeared in maps and manuscripts of the Middle Ages and the fourteenth and fifteenth centuries, but there is no definite evidence connecting this so-called *Terra Australis* with Australia.

Reference by Marco Polo (1254–1324) to a land called Locac, and several indications on maps and globes in the fifteenth and sixteenth centuries have been assumed to relate to Australia, but little weight can now be attached to these suppositions. Cornelius Wytfliet's map of 1597, however, indicates roughly the eastern and western coasts of Australia, as well as the Gulf of Carpentaria, although the oft-quoted passage in his *Descriptionis Ptolemaicæ Augmentum* describing the *Australis Terra* has been considered to have had its origin in the voyages through the Straits of Magellan and the discovery of Tierra del Fuego rather than that of Australia.

3. **Discovery of Australia.**—(i) *The Spaniards.* Disregarding the suggestion, for which there is no evidence, that the Arabs had come to Australia long before the Portuguese, the Spaniards or the Dutch, and apart from the possibility that the Portuguese may have discovered part of the Australian coast before 1542, the coastal exploration of Australia may be taken as having begun with the Spaniards and the Dutch.

In 1606, the Spaniard Quiros, on reaching the island that has retained the name of Espiritu Santo (the largest island of the New Hebrides group), thought he had discovered the great land of the south, and therefore named the group *La Australia del Espiritu Santo*. After leaving the New Hebrides, Quiros sailed eastward, but Torres, his second-in-command, took a westerly course and passed through the strait that now bears his name. In all probability he sighted the Australian continent, but no mention of it is made in his records. This voyage marks the close of Spanish activity in the work of discovery in the South Seas.

(ii) *The Dutch.* The Dutch discovered Australia when the Dutch East India Company sent the *Duyfken* from Bantam, Java, to explore the islands of New Guinea. During March, 1606, the *Duyfken* coasted along the southern shores of New Guinea and followed the west coast of Cape York peninsula as far as Cape Keer-Weer (Turn Again).

During the following thirty years, there were nine visits of Dutch navigators to Australian waters; by 1636, through their efforts, the coast of Australia from Cape York westward around to the Great Australian Bight had been discovered.

In 1642, Abel Janszoon Tasman set out from Batavia to ascertain the extent of the great southern continent. He named Van Diemen's Land, imagining it to be part of Australia proper, and sailing north-easterly discovered New Zealand and returned to Batavia. In his second voyage in 1644, Tasman visited the northern coast of Australia, sailing round the Gulf of Carpentaria and along the north-west coast as far south as the tropic of Capricorn. This voyage of Tasman's may be said to have ended the period of Dutch discoveries, although there were subsequent visits by the Dutch to Australia (de Vlamingh in 1696 and Van Delft in 1705).

4. Discoveries by the English.—In the meantime, the English had made their first appearance on the Australian coast in 1688, when the north-westerly shores were visited by William Dampier, as supercargo of the *Cygnets*, a trading vessel whose crew had turned buccaneers. In 1699, he again visited Australia, in command of H.M.S. *Roebuck*, and on his return to England published an account in which a description is given of trees, flowers, birds and reptiles observed, and of encounters with natives.

At the end of the seventeenth century, it was uncertain whether Tasmania and New Zealand were parts of Australia, or whether they were separated from it, but themselves formed part of a great Antarctic Continent. Lieutenant (later Captain) James Cook's first voyage, though primarily undertaken for the purpose of observing the transit of Venus from Tahiti, had also the objective of ascertaining whether the unexplored part of the southern hemisphere was only an immense mass of water or contained another continent. In command of H.M.S. *Endeavour*, a barque of 370 tons burden, carrying about 85 persons, and accompanied by Sir Joseph Banks the botanist, Dr. Solander the naturalist, Green the astronomer, draughtsmen and servants, Cook, after observing the transit of Venus at Tahiti, turned towards New Zealand, sighting that land on 7th October, 1769, in the neighbourhood of Poverty Bay. Circumnavigating the North and South Islands, he proved that New Zealand was connected neither with the supposed Antarctic Continent nor with Australia, and took formal possession thereof in the name of the British Crown. On 20th April, 1770, at 6 a.m., Cook sighted the Australian mainland at a place he called Point Hicks, naming it after his first-lieutenant, who first saw it. Coasting northwards, Botany Bay was discovered on 29th April, 1770. The *Endeavour* dropped anchor and Cook landed on the same day. Cook sailed along the coast in a northerly direction for nearly 1,300 miles until 11th June, 1770, when the *Endeavour* was seriously damaged by striking a coral reef in the vicinity of Trinity Bay. Repairs occupied nearly two months and the *Endeavour* then again set her course to the north, sailing through Torres Strait and anchoring in the Downs on 13th July, 1771. In 1772, Cook was put in command of the ships *Resolution* and *Adventure*, with a view to ascertaining whether a great southern continent existed. Having satisfied himself that, even if it did, it lay so far to the south as to be useless for trade and settlement, he returned to England in 1774. Cook's last voyage was undertaken in 1776, and he met his death on 14th February, 1779, by which date practically the whole coast of Australia had been explored. The only remaining discovery of importance was the existence of a channel between Tasmania and Australia. This was made by Bass and Flinders in 1798.

## § 2. The Annexation of Australia.

1. Annexation of Eastern Part of Australia, 1770.—Although representatives of the nations mentioned in the previous section landed or claimed to have landed on the shores of Australia on various occasions during the sixteenth and seventeenth centuries, it was not until 23rd August, 1770, that the history of Australia was brought into definite political connexion with Western civilization. It was on that date that Captain Cook took possession "of the whole eastern coast, from latitude 38° S. to this place, latitude 10½° S., in right of His Majesty King George the Third." Cook, however, proclaimed British sovereignty over only what are now the eastern parts of New South Wales and Queensland, and formal possession, on behalf of the British Crown, of the whole of the eastern part of the Australian continent and Tasmania was not taken until 26th January, 1788. It was on this last date that Captain Phillip's commission, first issued to him on 12th October, 1786, and amplified on 2nd April, 1787, was read to the people whom he had brought with him in the "First Fleet."

A full historical account of the period referred to may be found in the *Historical Records of New South Wales* Vol. 1., parts 1 and 2.

2. **Original Extent of New South Wales.**—The commission appointed Phillip “ Captain-General and Governor-in-Chief in and over our territory called New South Wales, extending from the Northern Cape or extremity of the coast called Cape York, in the latitude of ten degrees thirty-seven minutes south, to the southern extremity of the said territory of New South Wales or South Cape, in the latitude of forty-three degrees thirty-nine minutes south, and of all the country inland westward as far as the one hundred and thirty-fifth degree of east longitude reckoning from the meridian of Greenwich, including all the islands adjacent in the Pacific Ocean within the latitudes aforesaid of ten degrees thirty-seven minutes south and forty-three degrees thirty-nine minutes south.”

Although in November, 1769, Captain Cook had taken possession of the North Island of New Zealand, and in January, 1770, also of the South Island, it is doubtful whether, at the time when Captain Phillip’s commission was drawn up, New Zealand was considered as one of the “ islands adjacent in the Pacific Ocean.” The fact that under the Supreme Court Act (Imperial) of 1823 British residents in New Zealand were brought under the jurisdiction of the Court at Sydney, and that in 1839 there was a proposal on the part of the British Government to appoint a consul in New Zealand, would leave this an open question, as nothing more than extra-territorial jurisdiction may have been intended. Various hoistings of flags notwithstanding, New Zealand does not appear to have become British territory unequivocally until 1840. In that year, on 29th January, Captain Hobson arrived at the Bay of Islands. On the following day, he read the commission, which extended the boundaries of the Colony of New South Wales so as to embrace and comprehend the islands of New Zealand. On 5th February, the Treaty of Waitangi, made with the native chiefs, was signed. Finally, on 21st May, British sovereignty over the islands of New Zealand was explicitly proclaimed.

3. **Extension of New South Wales Westward, 1825.**—On 17th February, 1824, Earl Bathurst notified Sir Thomas Brisbane that he had recommended to His Majesty the dispatch of a ship of war to the north-west coast of New Holland for the purpose of taking possession of the coast between the western coast of Bathurst Island and the eastern side of Coburg Peninsula. Captain James J. Gordon Bremer of H.M.S. *Tamar*, who was selected for the purpose, took possession on 20th September, 1824, of the coast from the 135th to the 129th degree of east longitude. On 16th July, 1825, the whole territory between those boundaries was described in Darling’s commission as being within the boundaries of New South Wales, thus increasing its area by 518,134 square miles, and making it, including New Zealand and excluding Tasmania, 2,076,308 square miles, or also excluding New Zealand, 1,972,446 square miles.

4. **Annexation of Western Australia, 1827.**—An expedition under Major Lockyer, sent by Lieutenant-General Sir Ralph Darling, then Governor of New South Wales, to found a settlement at King George Sound, sailed from Sydney on 9th November, 1826, landed at the Sound on 26th December following, and on 21st January, 1827, hoisted the British flag. Captain Stirling, in command of H.M.S. *Success*, arrived at Sydney a few weeks after the departure of the expedition to King George Sound. He obtained the Governor’s permission to visit Swan River with a view to seizing a position on the western coast and reporting upon its suitability as a place of settlement. Captain Stirling left Sydney on 17th January, 1827, and on his return in the following April submitted a glowing report on what he described as a “ rich and romantic country,” urging its occupation for the purpose of settlement. He left for England in July, 1827, continuing his advocacy— notwithstanding much discouragement—with unabated enthusiasm. He was at last successful, the result being mainly due to the formation of an association of prospective settlers having capital at their disposal. He was appointed Lieutenant-Governor and with a party of settlers arrived at Garden Island, near the Swan River, in the ship *Parmelia* in June, 1829. On the 2nd of the preceding month, Captain Fremantle, in command of H.M.S. *Challenge*, arrived and hoisted the British flag on the south head of Swan River, again asserting possession of “ all that part of New Holland, which is not included within the territory of New South Wales.” Thus, before the middle of 1829, the whole territory now known as the Commonwealth of Australia had been constituted a dependency of the United Kingdom.

### § 3. The Exploration of Australia.

A summary of the more important facts relating to the exploration of Australia was embodied in this Chapter in issues of the Official Year Book up to and including No. 22.

### § 4. The Creation of the Several Colonies.

1. **New South Wales.**—In Governor Phillip's commission of 1786, the mainland of Australia was divided by the 135th meridian of east longitude into two parts. The earliest colonists believed that the present State of Tasmania was actually joined to the mainland, and it was not till 1798 that the contrary was known. In that year, Bass and Flinders proved that it was an island by sailing through Bass Strait. The territory of New South Wales, as originally constituted, and of New Zealand, which may be included although Cook's annexation was not properly given effect to until 1840, consisted of 1,584,389 square miles. A further area of 518,134 square miles was added in 1825, when the western boundary was extended to the 129th east meridian. The territory was subsequently reduced by the separation of various areas to form the other colonies, and at the time of the establishment of the Commonwealth the area of New South Wales was 310,372 square miles.

Lord Howe Island, which is a dependency of New South Wales and for political purposes is included in one of the electorates of Sydney, is situated in latitude 31° 30' south, longitude 159° 5' east, about 436 miles north-east of Sydney, and has an area of 3,220 acres. The climate is mild and the rainfall abundant, but on account of the rocky formation of its surface only about 300 acres are suitable for cultivation, most of which are devoted to the production of Kentia palm seed. The land belongs to the Crown and is occupied rent-free on sufferance.

Discovered in 1788, the Island was first settled by a small party of Maoris in 1853; afterwards a colony was settled from Sydney. A Board of Control at Sydney manages the affairs of the Island and supervises the palm seed industry. The population was 278 at the Census of 30th June, 1954.

2. **Tasmania.**—In 1825, Van Diemen's Land, as Tasmania was then called, was politically separated from New South Wales, being constituted a separate colony on 14th June of that year. The area of the colony was 26,215 square miles.

Macquarie Island, about 1,000 miles south-east of Hobart, together with a few rocky islets nearby, has been a dependency of Tasmania since the nineteenth century. In December, 1911, five members of the Australian National Antarctic Expedition landed on the island and remained there until 1915. On 3rd March, 1948, another party was landed to man a new station and this has since been maintained as a scientific base. The island is about 21 miles long and 2 miles wide.

3. **Western Australia.**—The territory westward of the 129th meridian, comprising 975,920 square miles, was constituted a colony under the name of Western Australia in June, 1829. It was always distinct and independent of New South Wales, though until 1831 the settlement on King George Sound remained under that jurisdiction.

4. **South Australia.**—On 15th August, 1834, the Act 4 and 5 William IV., cap. 95, was passed, creating South Australia a "province," and towards the end of the year 1836 settlement took place. The first Governor, Captain Hindmarsh, R.N., arrived at Holdfast Bay on 28th December, 1836, and on the same day the new colony was officially proclaimed. The new colony embraced 309,850 square miles of territory, lying south of the 26th parallel of south latitude, and between the 141st and 132nd meridians of east longitude. On 10th December, 1861, by the authority of the Imperial Act 24 and 25 Vict., cap. 44, the western boundary of South Australia was extended to coincide with the eastern boundary of Western Australia, namely, the 129th east meridian. The area of the extension was approximately 70,220 square miles. Nearly two years later, on 6th July, 1863, the Northern Territory, comprising 523,620 square miles, by letters patent, was brought under the jurisdiction of South Australia, which thereupon controlled an area of 903,690 square miles.

5. **New Zealand.**—New Zealand, nominally annexed by Captain Cook and formally declared by proclamation in 1840 as a dependency of New South Wales, by letters patent of 16th November of that year, was constituted a separate colony under the powers of the Act 3 and 4 Vict., cap. 62, of 7th August, 1840. Proclamation of the separation was made on 3rd May, 1841. The area of the colony was 103,862 square miles.

6. **Victoria.**—In 1851, which was known as the "Port Phillip District" of New South Wales was constituted the colony of Victoria, "bounded on the north and north-west by a straight line drawn from Cape Howe to the nearest source of the River Murray and thence by the course of that river to the eastern boundary of the colony of South Australia." The area of the new colony was 87,884 square miles, and its separate existence took effect from 1st July, 1851, upon the issuing of the writs for the first election of elective members of the Legislative Council.

7. **Queensland.**—The northern squatting districts of Moreton, Darling Downs, Burnett, Wide Bay, Maranoa, Leichhardt and Port Curtis, together with the reputed county of Stanley, were granted an independent administration and formed into a distinct colony

under the name of Queensland by letters patent dated 6th June, 1859, although separation from New South Wales was not completed until 10th December of the same year, upon the assumption of office of the first Governor. The territory comprised in the new colony was "so much of the colony of New South Wales as lies northwards of a line commencing on the sea-coast at Point Danger in latitude about 28° 8' south, running westward along the Macpherson and Dividing Ranges and the Dumaresq River to the MacIntyre River, thence downward to the 29th parallel of south latitude, and following that parallel westerly to the 141st meridian of east longitude, which is the eastern boundary of South Australia, together with all the adjacent islands, their members, and appurtenances in the Pacific Ocean". The area of the colony thus constituted was 554,300 square miles. By letters patent dated 13th March, 1861, forwarded by the Colonial Secretary to the Governor of Queensland on 12th April, 1862, the area of Queensland was increased by the annexation of "so much of the colony of New South Wales as lies to the northward of the 26th parallel of south latitude, and between the 141st and 138th meridians of east longitude, together with all and every the adjacent islands, their members, and appurtenances, in the Gulf of Carpentaria." With this addition the area of Queensland became 670,500 square miles.

### § 5. The Establishment of the Commonwealth of Australia.

1. **General.**—On 1st January, 1901, the colonies mentioned, with the exception of New Zealand, were federated under the name of the "Commonwealth of Australia," the designation of "Colonies"—except in the case of the Northern Territory, to which the designation "Territory" is applied—being at the same time changed into that of "States".

2. **Transfer of the Northern Territory to the Commonwealth.**—On 7th December, 1907, the Commonwealth and the State of South Australia entered into an agreement for the surrender to and acceptance by the Commonwealth, of the Northern Territory, subject to approval by the Parliaments of the Commonwealth and the State. This approval was given by the South Australian Parliament under The Northern Territory Surrender Act 1907 (assented to on 14th May, 1908), and by the Commonwealth Parliament under the Northern Territory Acceptance Act 1910 (assented to on 16th November, 1910). The Territory was formally transferred to the Commonwealth on 1st January, 1911, and became the Northern Territory of Australia.

3. **Transfer of the Australian Capital Territory to the Commonwealth.**—On 18th October, 1909, the Commonwealth and the State of New South Wales entered into an agreement for the surrender to and acceptance by the Commonwealth of an area of 911 square miles as the Seat of Government of the Commonwealth. In December, 1909, Acts were passed by the Commonwealth and New South Wales Parliaments approving the agreement, and on 5th December, 1910, a proclamation was issued vesting the Territory in the Commonwealth on and from 1st January, 1911. By the Jervis Bay Territory Acceptance Act 1915, an area of 28 square miles at Jervis Bay, surrendered by New South Wales according to an agreement made in 1913, was accepted by the Commonwealth, and was transferred as from 4th September, 1915.

4. **Present Composition of the Commonwealth.**—The total area of the Commonwealth of Australia is 2,974,581 square miles. The dates of creation and the areas of its component States and Territories, as determined on the final adjustment of their boundaries, are shown below:—

#### THE COMMONWEALTH OF AUSTRALIA: AREA, ETC., OF COMPONENT STATES AND TERRITORIES.

State or Territory.	Year of Formation into Separate Colony or Territory.	Present Area in Square Miles.	State or Territory.	Year of Formation into Separate Colony or Territory.	Present Area in Square Miles.
New South Wales	1786	309,433	Northern Territory	1863	523,620
Victoria .. ..	1851	87,884	Australian Capital Territory ..	1911	939
Queensland ..	1859	670,500	Commonwealth of Australia ..	..	2,974,581
South Australia ..	1834	380,070			
Western Australia	1829	975,920			
Tasmania ..	1825	26,215			

## § 6. The Constitutions of the States and of the Commonwealth.

1. **General.**—Information regarding the development of the Constitutions of the various Colonies (now States), together with a brief history of the Federal movement in Australia, was embodied in this Chapter in issues of the Official Year Book up to and including No. 22.

2. **Commonwealth Constitution Act.**—The Commonwealth of Australia Constitution Act, 63 and 64 Vict., Chapter 12, namely: “An Act to constitute the Commonwealth of Australia,” as amended by the Constitution Alteration (Senate Elections) 1906, the Constitution Alteration (State Debts) 1909, the Constitution Alteration (State Debts) 1928, and the Constitution Alteration (Social Services) 1946, is given *in extenso* hereunder, and the text contains all the alterations of the Constitution which have been made up to and including 31st December, 1958.

### THE COMMONWEALTH OF AUSTRALIA CONSTITUTION ACT, 63 & 64 VICT., CHAPTER 12.

*An Act to constitute the Commonwealth of Australia. [9th July, 1900.]*

WHEREAS the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, humbly relying on the blessing of Almighty God, have agreed to unite in one indissoluble Federal Commonwealth under the Crown of the United Kingdom of Great Britain and Ireland, and under the Constitution hereby established:

And whereas it is expedient to provide for the admission into the Commonwealth of other Australasian Colonies and possessions of the Queen:

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

1. This Act may be cited as the Commonwealth of Australia Constitution Act.
2. The provisions of this Act referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom.
3. It shall be lawful for the Queen, with the advice of the Privy Council, to declare by proclamation that, on and after a day therein appointed, not being later than one year after the passing of this Act, the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, and also, if Her Majesty is satisfied that the people of Western Australia have agreed thereto, of Western Australia, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia. But the Queen may, at any time after the proclamation, appoint a Governor-General for the Commonwealth.
4. The Commonwealth shall be established, and the Constitution of the Commonwealth shall take effect, on and after the day so appointed. But the Parliaments of the several colonies may at any time after the passing of this Act make any such laws, to come into operation on the day so appointed, as they might have made if the Constitution had taken effect at the passing of this Act.
5. This Act, and all laws made by the Parliament of the Commonwealth under the Constitution, shall be binding on the courts, judges, and people of every State and of every part of the Commonwealth, notwithstanding anything in the laws of any State; and the laws of the Commonwealth shall be in force on all British ships, the Queen's ships of war excepted, whose first port of clearance and whose port of destination are in the Commonwealth.
6. “The Commonwealth” shall mean the Commonwealth of Australia as established under this Act.  
 “The States” shall mean such of the colonies of New South Wales, New Zealand, Queensland, Tasmania, Victoria, Western Australia, and South Australia, including the northern territory of South Australia, as for the time being are parts of the Commonwealth, and such colonies or territories as may be admitted into or established by the Commonwealth as States; and each of such parts of the Commonwealth shall be called “a State.”  
 “Original States” shall mean such States as are parts of the Commonwealth at its establishment.

7. The Federal Council of Australasia Act, 1885, is hereby repealed, but so as not to affect any laws passed by the Federal Council of Australasia and in force at the establishment of the Commonwealth.

Any such law may be repealed as to any State by the Parliament of the Commonwealth, or as to any colony not being a State by the Parliament thereof.

8. After the passing of this Act the Colonial Boundaries Act, 1895, shall not apply to any colony which becomes a State of the Commonwealth; but the Commonwealth shall be taken to be a self-governing colony for the purposes of that Act.

9. The Constitution of the Commonwealth shall be as follows:—

### THE CONSTITUTION.

This Constitution is divided as follows:—

- Chapter I.—The Parliament:
  - Part I.—General:
  - Part II.—The Senate:
  - Part III.—The House of Representatives:
  - Part IV.—Both Houses of the Parliament:
  - Part V.—Powers of the Parliament:
- Chapter II.—The Executive Government:
- Chapter III.—The Judicature:
- Chapter IV.—Finance and Trade:
- Chapter V.—The States:
- Chapter VI.—New States:
- Chapter VII.—Miscellaneous:
- Chapter VIII.—Alteration of the Constitution.
- The Schedule.

### CHAPTER I.—THE PARLIAMENT.

#### PART I.—GENERAL.

1. The legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives, and which is hereinafter called “The Parliament,” or “The Parliament of the Commonwealth.”

2. A Governor-General appointed by the Queen shall be Her Majesty’s representative in the Commonwealth, and shall have and may exercise in the Commonwealth during the Queen’s pleasure, but subject to this Constitution, such powers and functions of the Queen as Her Majesty may be pleased to assign to him.

3. There shall be payable to the Queen out of the Consolidated Revenue Fund of the Commonwealth, for the salary of the Governor-General, an annual sum which, until the Parliament otherwise provides, shall be ten thousand pounds.

The salary of a Governor-General shall not be altered during his continuance in office.

4. The provisions of this Constitution relating to the Governor-General extend and apply to the Governor-General for the time being, or such person as the Queen may appoint to administer the Government of the Commonwealth; but no such person shall be entitled to receive any salary from the Commonwealth in respect of any other office during his administration of the Government of the Commonwealth.

5. The Governor-General may appoint such times for holding the sessions of the Parliament as he thinks fit, and may also from time to time, by Proclamation or otherwise, prorogue the Parliament, and may in like manner dissolve the House of Representatives.

After any general election the Parliament shall be summoned to meet not later than thirty days after the day appointed for the return of the writs.

The Parliament shall be summoned to meet not later than six months after the establishment of the Commonwealth.

6. There shall be a session of the Parliament once at least in every year, so that twelve months shall not intervene between the last sitting of the Parliament in one session and its first sitting in the next session.

## PART II.—THE SENATE.

7. The Senate shall be composed of senators for each State, directly chosen by the people of the State, voting, until the Parliament otherwise provides, as one electorate.

But until the Parliament of the Commonwealth otherwise provides, the Parliament of the State of Queensland, if that State be an Original State, may make laws dividing the State into divisions and determining the number of senators to be chosen for each division, and in the absence of such provision the State shall be one electorate.

Until the Parliament otherwise provides there shall be six senators for each Original State.\* The Parliament may make laws increasing or diminishing the number of senators for each State, but so that equal representation of the several Original States shall be maintained and that no Original State shall have less than six senators.

The senators shall be chosen for a term of six years, and the names of the senators chosen for each State shall be certified by the Governor to the Governor-General.

8. The qualification of electors of senators shall be in each State that which is prescribed by this Constitution, or by the Parliament, as the qualification for electors of members of the House of Representatives; but in the choosing of senators each elector shall vote only once.

9. The Parliament of the Commonwealth may make laws prescribing the method of choosing senators, but so that the method shall be uniform for all the States. Subject to any such law, the Parliament of each State may make laws prescribing the method of choosing the senators for that State.

The Parliament of a State may make laws for determining the times and places of elections of senators for the State.

10. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State, for the time being, relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections of senators for the State.

11. The Senate may proceed to the despatch of business, notwithstanding the failure of any State to provide for its representation in the Senate.

12. The Governor of any State may cause writs to be issued for elections of senators for the State. In case of the dissolution of the Senate the writs shall be issued within ten days from the proclamation of such dissolution.

13. As soon as may be after the Senate first meets, and after each first meeting of the Senate following a dissolution thereof, the Senate shall divide the senators chosen for each State into two classes, as nearly equal in number as practicable; and the places of the senators of the first class shall become vacant at the expiration of [the third year] *three years*,† and the places of those of the second class at the expiration of [the sixth year] *six years*,† from the beginning of their term of service; and afterwards the places of senators shall become vacant at the expiration of six years from the beginning of their term of service.

The election to fill vacant places shall be made [in the year at the expiration of which] *within one year before*† the places are to become vacant.

For the purposes of this section the term of service of a senator shall be taken to begin on the first day of [January] *July*† following the day of his election, except in the cases of the first election and of the election next after any dissolution of the Senate, when it shall be taken to begin on the first day of [January] *July*† preceding the day of his election.

14. Whenever the number of senators for a State is increased or diminished, the Parliament of the Commonwealth may make such provision for the vacating of the places of senators for the State as it deems necessary to maintain regularity in the rotation.

15. If the place of a senator becomes vacant before the expiration of his term of service, the Houses of Parliament of the State for which he was chosen shall, sitting and voting together, choose a person to hold the place until the expiration of the term, or until the election of a successor as hereinafter provided, whichever first happens. But if the Houses of Parliament of the State are not in session at the time when the vacancy is notified,

\* The Parliament has otherwise provided, by means of the Representation Act 1948, that the number of senators shall be ten for each State, from the first meeting of Parliament after the first dissolution of the House of Representatives occurring after the commencement of the Act (18th May, 1948).

† As amended by Section 2 of the Constitution Alteration (Senate Elections) 1906. The words in square brackets have been repealed; amendments are shown in italics.

the Governor of the State, with the advice of the Executive Council thereof, may appoint a person to hold the place until the expiration of fourteen days after the beginning of the next session of the Parliament of the State, or until the election of a successor, whichever first happens.

At the next general election of members of the House of Representatives, or at the next election of senators for the State, whichever first happens, a successor shall, if the term has not then expired, be chosen to hold the place from the date of his election until the expiration of the term.

The name of any senator so chosen or appointed shall be certified by the Governor of the State to the Governor-General.

16. The qualifications of a senator shall be the same as those of a member of the House of Representatives.

17. The Senate shall, before proceeding to the despatch of any other business, choose a senator to be the President of the Senate; and as often as the office of President becomes vacant the Senate shall again choose a senator to be the President.

The President shall cease to hold his office if he ceases to be a senator. He may be removed from office by a vote of the Senate, or he may resign his office or his seat by writing addressed to the Governor-General.

18. Before or during any absence of the President, the Senate may choose a senator to perform his duties in his absence.

19. A senator may, by writing addressed to the President, or to the Governor-General if there is no President or if the President is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

20. The place of a senator shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the Senate, fails to attend the Senate.

21. Whenever a vacancy happens in the Senate, the President, or if there is no President or if the President is absent from the Commonwealth the Governor-General, shall notify the same to the Governor of the State in the representation of which the vacancy has happened.

22. Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the senators shall be necessary to constitute a meeting of the Senate for the exercise of its powers.

23. Questions arising in the Senate shall be determined by a majority of votes, and each senator shall have one vote. The President shall in all cases be entitled to a vote; and when the votes are equal the question shall pass in the negative.

### PART III.—THE HOUSE OF REPRESENTATIVES.

24. The House of Representatives shall be composed of members directly chosen by the people of the Commonwealth, and the number of such members shall be, as nearly as practicable, twice the number of the senators.

The number of members chosen in the several States shall be in proportion to the respective numbers of their people, and shall, until the Parliament otherwise provides, be determined, whenever necessary, in the following manner:—

- (i) A quota shall be ascertained by dividing the number of the people of the Commonwealth, as shown by the latest statistics of the Commonwealth, by twice the number of the senators;
- (ii) The number of members to be chosen in each State shall be determined by dividing the number of the people of the State, as shown by the latest statistics of the Commonwealth, by the quota; and if on such division there is a remainder greater than one-half of the quota, one more member shall be chosen in the State.

But notwithstanding anything in this section five members at least shall be chosen in each Original State.

25. For the purposes of the last section, if by the law of any State all persons of any race are disqualified from voting at elections for the more numerous House of the Parliament of the State, then, in reckoning the number of the people of the State or of the Commonwealth, persons of that race resident in that State shall not be counted.

26. Notwithstanding anything in section twenty-four, the number of members to be chosen in each State at the first election shall be as follows:—

New South Wales ..	23	South Australia ..	6
Victoria ..	20	Tasmania ..	5
Queensland ..	8		

Provided that if Western Australia is an Original State, the numbers shall be as follows:—

New South Wales ..	26	South Australia ..	7
Victoria ..	23	Western Australia ..	5
Queensland ..	9	Tasmania ..	5

27. Subject to this Constitution, the Parliament may make laws for increasing or diminishing the number of the members of the House of Representatives.

28. Every House of Representatives shall continue for three years from the first meeting of the House, and no longer, but may be sooner dissolved by the Governor-General.

29. Until the Parliament of the Commonwealth otherwise provides, the Parliament of any State may make laws for determining the divisions in each State for which members of the House of Representatives may be chosen, and the number of members to be chosen for each division. A division shall not be formed out of parts of different States.

In the absence of other provision, each State shall be one electorate.

30. Until the Parliament otherwise provides, the qualification of electors of members of the House of Representatives shall be in each State that which is prescribed by the law of the State as the qualification of electors of the more numerous House of Parliament of the State; but in the choosing of members each elector shall vote only once.\*

31. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State for the time being relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections in the State of members of the House of Representatives.

32. The Governor-General in Council may cause writs to be issued for general elections of members of the House of Representatives.

After the first general election, the writs shall be issued within ten days from the expiry of a House of Representatives or from the proclamation of a dissolution thereof.

33. Whenever a vacancy happens in the House of Representatives, the Speaker shall issue his writ for the election of a new member, or if there is no Speaker or if he is absent from the Commonwealth the Governor-General in Council may issue the writ.

34. Until the Parliament otherwise provides, the qualifications of a member of the House of Representatives shall be as follows:—

(i) He must be of the full age of twenty-one years, and must be an elector entitled to vote at the election of members of the House of Representatives, or a person qualified to become such elector, and must have been for three years at the least a resident within the limits of the Commonwealth as existing at the time when he is chosen:

(ii) He must be a subject of the Queen, either natural-born or for at least five years naturalized under a law of the United Kingdom, or of a Colony which has become or becomes a State, or of the Commonwealth, or of a State.†

35. The House of Representatives shall, before proceeding to the despatch of any other business, choose a member to be the Speaker of the House, and as often as the office of Speaker becomes vacant the House shall again choose a member to be the Speaker.

The Speaker shall cease to hold his office if he ceases to be a member. He may be removed from office by a vote of the House, or he may resign his office or his seat by writing addressed to the Governor-General.

36. Before or during any absence of the Speaker, the House of Representatives may choose a member to perform his duties in his absence.

\* The Parliament has otherwise provided, by means of the Commonwealth Electoral Act 1918-1949, Section 39 (repealing an earlier provision made by the Commonwealth Franchise Act 1902). For present qualifications see Chapter III.—General Government.

† The Parliament has otherwise provided, by means of the Commonwealth Electoral Act 1918-1949, Section 69. For present qualifications see Chapter III.—General Government.

37. A member may by writing addressed to the Speaker, or to the Governor-General if there is no Speaker or if the Speaker is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

38. The place of a member shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the House, fails to attend the House.

39. Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the members of the House of Representatives shall be necessary to constitute a meeting of the House for the exercise of its powers.

40. Questions arising in the House of Representatives shall be determined by a majority of votes other than that of the Speaker. The Speaker shall not vote unless the numbers are equal, and then he shall have a casting vote.

PART IV.—BOTH HOUSES OF THE PARLIAMENT.

41. No adult person who has or acquires a right to vote at elections for the more numerous House of the Parliament of a State shall, while the right continues, be prevented by any law of the Commonwealth from voting at elections for either House of the Parliament of the Commonwealth.

42. Every senator and every member of the House of Representatives shall before taking his seat make and subscribe before the Governor-General, or some person authorized by him, an oath or affirmation of allegiance in the form set forth in the schedule to this Constitution.

43. A member of either House of the Parliament shall be incapable of being chosen or of sitting as a member of the other House.

44. Any person who—

- (i) Is under any acknowledgment of allegiance, obedience, or adherence to a foreign power, or is a subject or a citizen or entitled to the rights or privileges of a subject or a citizen of a foreign power: or
- (ii) Is attainted of treason, or has been convicted and is under sentence, or subject to be sentenced, for any offence punishable under the law of the Commonwealth or of a State by imprisonment for one year or longer: or
- (iii) Is an undischarged bankrupt or insolvent: or
- (iv) Holds any office of profit under the Crown, or any pension payable during the pleasure of the Crown out of any of the revenues of the Commonwealth: or
- (v) Has any direct or indirect pecuniary interest in any agreement with the Public Service of the Commonwealth otherwise than as a member and in common with the other members of an incorporated company consisting of more than twenty-five persons:

shall be incapable of being chosen or of sitting as a senator or a member of the House of Representatives.

But sub-section iv. does not apply to the office of any of the Queen's Ministers of State for the Commonwealth, or of any of the Queen's Ministers for a State, or to the receipt of pay, half-pay, or a pension by any person as an officer or member of the Queen's navy or army, or to the receipt of pay as an officer or member of the naval or military forces of the Commonwealth by any person whose services are not wholly employed by the Commonwealth.

45. If a senator or member of the House of Representatives—

- (i) Becomes subject to any of the disabilities mentioned in the last preceding section: or
- (ii) Takes the benefit, whether by assignment, composition, or otherwise, of any law relating to bankrupt or insolvent debtors: or
- (iii) Directly or indirectly takes or agrees to take any fee or honorarium for services rendered to the Commonwealth, or for services rendered in the Parliament to any person or State:

his place shall thereupon become vacant.

46. Until the Parliament otherwise provides, any person declared by this Constitution to be incapable of sitting as a senator or as a member of the House of Representatives shall, for every day on which he so sits, be liable to pay the sum of one hundred pounds to any person who sues for it in any court of competent jurisdiction.

47. Until the Parliament otherwise provides, any question respecting the qualification of a senator or of a member of the House of Representatives, or respecting a vacancy in either House of the Parliament, and any question of a disputed election to either House shall be determined by the House in which the question arises.

48. Until the Parliament otherwise provides, each senator and each member of the House of Representatives shall receive an allowance of four hundred pounds a year, to be reckoned from the day on which he takes his seat.\*

49. The powers, privileges, and immunities of the Senate and of the House of Representatives, and of the members and the committees of each House, shall be such as are declared by the Parliament, and until declared shall be those of the Commons House of Parliament of the United Kingdom, and of its members and committees, at the establishment of the Commonwealth.

50. Each House of the Parliament may make rules and orders with respect to—

- (i) The mode in which its powers, privileges, and immunities may be exercised and upheld;
- (ii) The order and conduct of its business and proceedings either separately or jointly with the other House.

#### PART V.—POWERS OF THE PARLIAMENT.†

51. The Parliament shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth with respect to:—

- (i) Trade and commerce with other countries, and among the States:
- (ii) Taxation; but so as not to discriminate between States or parts of States:
- (iii) Bounties on the production or export of goods, but so that such bounties shall be uniform throughout the Commonwealth:
- (iv) Borrowing money on the public credit of the Commonwealth:
- (v) Postal, telegraphic, telephonic, and other like services:
- (vi) The naval and military defence of the Commonwealth and of the several States, and the control of the forces to execute and maintain the laws of the Commonwealth:
- (vii) Lighthouses, lightships, beacons and buoys:
- (viii) Astronomical and meteorological observations:
- (ix) Quarantine:
- (x) Fisheries in Australian waters beyond territorial limits:
- (xi) Census and statistics:
- (xii) Currency, coinage, and legal tender:
- (xiii) Banking, other than State banking; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money:
- (xiv) Insurance, other than State insurance; also State insurance extending beyond the limits of the State concerned:
- (xv) Weights and measures:
- (xvi) Bills of exchange and promissory notes:
- (xvii) Bankruptcy and insolvency:
- (xviii) Copyrights, patents of inventions and designs, and trade marks:
- (xix) Naturalization and aliens:
- (xx) Foreign corporations, and trading or financial corporations formed within the limits of the Commonwealth:
- (xxi) Marriage:

\* The Parliamentary allowance was increased to £600 a year in 1907 (except in the cases of Ministers, the Presiding Officers of the two Houses, and the Chairman of Committees, whose allowances remained at £400 in addition to the emoluments of office), and to £1,000 a year in 1920 (Ministers, etc., £800). Under financial emergency legislation, Parliamentary salaries and allowances were reduced generally, the lowest level reached in respect of the Parliamentary allowance being £750 a year in 1932. Subsequently there was a gradual restoration to former levels, the allowance reaching £1,000 a year again in 1938, when, also, the proviso for the reduced allowance to Ministers, etc. was removed. In 1947, the Parliamentary allowance was increased to £1,500 a year, and in 1952 to £1,750. In 1920, additional allowances of £200 and £400 a year, respectively, were granted to the Leaders of the Opposition in the Senate and the House of Representatives, and in 1947 they were increased to £300 and £600 respectively. In 1947, also, an additional allowance of £400 a year was granted to the Leader in the House of Representatives (other than the Leader of the Opposition) of a recognized political party which has not less than ten members in the House of Representatives, and of which no member is a Minister.

† Particulars of proposed laws which were submitted to referenda are referred to in Chapter III.—General Government.

- (xxii) Divorce and matrimonial causes; and in relation thereto, parental rights, and the custody and guardianship of infants:
- (xxiii) Invalid and old-age pensions:
- (xxiiiA) \**The provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorize any form of civil conscription), benefits to students and family allowances:*
- (xxiv) The service and execution throughout the Commonwealth of the civil and criminal process and the judgments of the courts of the States:
- (xxv) The recognition throughout the Commonwealth of the laws, the public Acts and records, and the judicial proceedings of the States:
- (xxvi) The people of any race, other than the aboriginal race in any State, for whom it is deemed necessary to make special laws:
- (xxvii) Immigration and emigration:
- (xxviii) The influx of criminals:
- (xxix) External affairs:
- (xxx) The relations of the Commonwealth with the islands of the Pacific:
- (xxxi) The acquisition of property on just terms from any State or person for any purpose in respect of which the Parliament has power to make laws:
- (xxxii) The control of railways with respect to transport for the naval and military purposes of the Commonwealth:
- (xxxiii) The acquisition, with the consent of a State, of any railways of the State on terms arranged between the Commonwealth and the State:
- (xxxiv) Railway construction and extension in any State with the consent of that State:
- (xxxv) Conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State:
- (xxxvi) Matters in respect of which this Constitution makes provision until the Parliament otherwise provides:
- (xxxvii) Matters referred to the Parliament of the Commonwealth by the Parliament or Parliaments of any State or States, but so that the law shall extend only to States by whose Parliaments the matter is referred, or which afterwards adopt the law:
- (xxxviii) The exercise within the Commonwealth, at the request or with the concurrence of the Parliaments of all the States directly concerned, of any power which can at the establishment of this Constitution be exercised only by the Parliament of the United Kingdom or by the Federal Council of Australasia:
- (xxxix) Matters incidental to the execution of any power vested by this Constitution in the Parliament or in either House thereof, or in the Government of the Commonwealth, or in the Federal Judicature, or in any department or officer of the Commonwealth.

52. The Parliament shall, subject to this Constitution, have exclusive power to make laws for the peace, order, and good government of the Commonwealth with respect to—

- (i) The seat of Government of the Commonwealth, and all places acquired by the Commonwealth for public purposes:
- (ii) Matters relating to any department of the public service the control of which is by this Constitution transferred to the Executive Government of the Commonwealth:
- (iii) Other matters declared by this Constitution to be within the exclusive power of the Parliament.

53. Proposed laws appropriating revenue or moneys, or imposing taxation, shall not originate in the Senate. But a proposed law shall not be taken to appropriate revenue or moneys, or to impose taxation, by reason only of its containing provisions for the imposition or appropriation of fines or other pecuniary penalties, or for the demand or payment or appropriation of fees for licences, or fees for services under the proposed law.

The Senate may not amend proposed laws imposing taxation, or proposed laws appropriating revenue or moneys for the ordinary annual services of the Government.

The Senate may not amend any proposed law so as to increase any proposed charge or burden on the people.

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\* Under Section 2 of the Constitution Alteration (Social Services) 1946, the Constitution was amended by the insertion of this paragraph.

The Senate may at any stage return to the House of Representatives any proposed law which the Senate may not amend, requesting, by message, the omission or amendment of any items or provisions therein. And the House of Representatives may, if it thinks fit, make any of such omissions or amendments, with or without modifications.

Except as provided in this section, the Senate shall have equal power with the House of Representatives in respect of all proposed laws.

54. The proposed law which appropriates revenue or moneys for the ordinary annual services of the Government shall deal only with such appropriation.

55. Laws imposing taxation shall deal only with the imposition of taxation, and any provision therein dealing with any other matter shall be of no effect.

Laws imposing taxation, except laws imposing duties of customs or of excise, shall deal with one subject of taxation only; but laws imposing duties of customs shall deal with duties of customs only, and laws imposing duties of excise shall deal with duties of excise only.

56. A vote, resolution, or proposed law for the appropriation of revenue or moneys shall not be passed unless the purpose of the appropriation has in the same session been recommended by message of the Governor-General to the House in which the proposal originated.

57. If the House of Representatives passes any proposed law, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, and if after an interval of three months the House of Representatives, in the same or the next session, again passes the proposed law with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may dissolve the Senate and the House of Representatives simultaneously. But such dissolution shall not take place within six months before the date of the expiry of the House of Representatives by effluxion of time.

If after such dissolution the House of Representatives again passes the proposed law, with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may convene a joint sitting of the members of the Senate and of the House of Representatives.

The members present at the joint sitting may deliberate and shall vote together upon the proposed law as last proposed by the House of Representatives, and upon amendments, if any, which have been made therein by one House and not agreed to by the other, and any such amendments which are affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives shall be taken to have been carried, and if the proposed law, with the amendments, if any, so carried is affirmed by an absolute majority of the total number of members of the Senate and House of Representatives, it shall be taken to have been duly passed by both Houses of the Parliament, and shall be presented to the Governor-General for the Queen's assent.

58. When a proposed law passed by both Houses of the Parliament is presented to the Governor-General for the Queen's assent, he shall declare, according to his discretion, but subject to this Constitution, that he assents in the Queen's name, or that he withholds assent, or that he reserves the law for the Queen's pleasure.

The Governor-General may return to the House in which it originated any proposed law so presented to him, and may transmit therewith any amendments which he may recommend, and the Houses may deal with the recommendation.

59. The Queen may disallow any law within one year from the Governor-General's assent, and such disallowance on being made known by the Governor-General by speech or message to each of the Houses of the Parliament, or by Proclamation, shall annul the law from the day when the disallowance is so made known.

60. A proposed law reserved for the Queen's pleasure shall not have any force unless and until within two years from the day on which it was presented to the Governor-General for the Queen's assent the Governor-General makes known, by speech or message to each of the Houses of the Parliament, or by Proclamation, that it has received the Queen's assent.

CHAPTER II.—THE EXECUTIVE GOVERNMENT.

61. The executive power of the Commonwealth is vested in the Queen and is exercisable by the Governor-General as the Queen's representative, and extends to the execution and maintenance of this Constitution, and of the laws of the Commonwealth.

62. There shall be a Federal Executive Council to advise the Governor-General in the government of the Commonwealth, and the members of the Council shall be chosen and summoned by the Governor-General and sworn as Executive Councillors, and shall hold office during his pleasure.

63. The provisions of this Constitution referring to the Governor-General in Council shall be construed as referring to the Governor-General acting with the advice of the Federal Executive Council.

64. The Governor-General may appoint officers to administer such departments of State of the Commonwealth as the Governor-General in Council may establish.

Such officers shall hold office during the pleasure of the Governor-General. They shall be members of the Federal Executive Council, and shall be the Queen's Ministers of State for the Commonwealth.

After the first general election no Minister of State shall hold office for a longer period than three months unless he is or becomes a senator or a member of the House of Representatives.

65. Until the Parliament otherwise provides, the Ministers of State shall not exceed seven in number, and shall hold such offices as the Parliament prescribes, or, in the absence of provision, as the Governor-General directs.\*

66. There shall be payable to the Queen, out of the Consolidated Revenue Fund of the Commonwealth, for the salaries of the Ministers of State, an annual sum which until the Parliament otherwise provides, shall not exceed twelve thousand pounds a year.\*

67. Until the Parliament otherwise provides, the appointment and removal of all other officers of the Executive Government of the Commonwealth shall be vested in the Governor-General in Council, unless the appointment is delegated by the Governor-General in Council or by a law of the Commonwealth to some other authority.

68. The command in chief of the naval and military forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

69. On a date or dates to be proclaimed by the Governor-General after the establishment of the Commonwealth the following departments of the public service in each State shall become transferred to the Commonwealth:—

Posts, telegraphs, and telephones:		Lighthouses, lightships, beacons, and buoys:
Naval and military defence:		Quarantine.

But the Departments of customs and of excise in each State shall become transferred to the Commonwealth on its establishment.

70. In respect of matters which, under this Constitution, pass to the Executive Government of the Commonwealth, all powers and functions which at the establishment of the Commonwealth are vested in the Governor of a Colony, or in the Governor of a Colony with the advice of his Executive Council, or in any authority of a Colony, shall vest in the Governor-General, or in the Governor-General in Council, or in the authority exercising similar powers under the Commonwealth, as the case requires.

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\* The Ministers of State were increased to eight in 1915, to nine in 1917, to ten in 1935, to eleven in 1938, and to nineteen in 1941, a special war-time provision during the continuance in operation of the National Security Act which was extended in 1946 on the expiry of that Act. The number was increased to twenty in 1951 and to twenty-two in 1956. The annual appropriation for Ministers' salaries received in addition to their allowances as Members (see p. 12) was increased to £13,650 in 1915 and to £15,300 in 1917. Under financial emergency legislation, in addition to the reductions in Members' allowances the appropriation for Ministers was also reduced, in 1932 reaching the level of £10,710. The reductions were removed gradually, and finally in 1938 when the appropriation was £16,950. At the same time, an additional allowance of £1,500 a year was granted to the Prime Minister, and the proviso for the reduced Parliamentary allowance to Ministers was removed. In 1941, the annual appropriation for Ministers was increased, as a war-time provision, to £21,250. This was extended in 1946. In 1947, the appropriation was increased to £27,650, in 1951 to £29,000, in 1952 to £41,000, and in 1956 to £46,500.

## CHAPTER III.—THE JUDICATURE.

71. The judicial power of the Commonwealth shall be vested in a Federal Supreme Court, to be called the High Court of Australia, and in such other federal courts as the Parliament creates, and in such other courts as it invests with federal jurisdiction. The High Court shall consist of a Chief Justice, and so many other Justices, not less than two, as the Parliament prescribes.\*

72. The Justices of the High Court and of the other Courts created by the Parliament—

- (i) Shall be appointed by the Governor-General in Council:
- (ii) Shall not be removed except by the Governor-General in Council, on an address from both Houses of the Parliament in the same session, praying for such removal on the ground of proved misbehaviour or incapacity:
- (iii) Shall receive such remuneration as the Parliament may fix; but the remuneration shall not be diminished during their continuance in office.\*

73. The High Court shall have jurisdiction, with such exceptions and subject to such regulations as the Parliament prescribes, to hear and determine appeals from all judgments, decrees, orders, and sentences—

- (i) Of any Justice or Justices exercising the original jurisdiction of the High Court:
- (ii) Of any other federal court, or court exercising federal jurisdiction; or of the Supreme Court of any State, or of any other court of any State from which at the establishment of the Commonwealth an appeal lies to the Queen in Council:
- (iii) Of the Inter-State Commission, but as to questions of law only: and the judgment of the High Court in all such cases shall be final and conclusive.

But no exception or regulation prescribed by the Parliament shall prevent the High Court from hearing and determining any appeal from the Supreme Court of a State in any matter in which at the establishment of the Commonwealth an appeal lies from such Supreme Court to the Queen in Council.

Until the Parliament otherwise provides, the conditions of and restrictions on appeals to the Queen in Council from the Supreme Courts of the several States shall be applicable to appeals from them to the High Court.

74. No appeal shall be permitted to the Queen in Council from a decision of the High Court upon any question, howsoever arising, as to the limits *inter se* of the Constitutional powers of the Commonwealth and those of any State or States, or as to the limits *inter se* of the Constitutional powers of any two or more States, unless the High Court shall certify that the question is one which ought to be determined by Her Majesty in Council.

The High Court may so certify if satisfied that for any special reason the certificate should be granted, and thereupon an appeal shall lie to Her Majesty in Council on the question without further leave.

Except as provided in this section, this Constitution shall not impair any right which the Queen may be pleased to exercise by virtue of Her Royal prerogative to grant special leave of appeal from the High Court to Her Majesty in Council. The Parliament may make laws limiting the matters in which such leave may be asked, but proposed laws containing any such limitation shall be reserved by the Governor-General for Her Majesty's pleasure.

75. In all matters—

- (i) Arising under any treaty:
- (ii) Affecting consuls or other representatives of other countries:
- (iii) In which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party:
- (iv) Between States, or between residents of different States, or between a State and a resident of another State:
- (v) In which a writ of Mandamus or prohibition or an injunction is sought against an officer of the Commonwealth:

the High Court shall have original jurisdiction.

\* The Judiciary Act 1903 provided for a Chief Justice and two other Justices. Subsequent amendments to the Act increased the number of other Justices to four and later six, and then reduced it to five. In 1946, the number was again increased to six. The Judiciary Act 1903 also provided for the payment of a salary of £3,500 a year to the Chief Justice and of £3,000 a year to each other Justice. In 1947, these salaries were increased respectively to £4,500 and £4,000 a year, in 1950 to £5,000 and £4,500 a year, and in 1955 to £8,000 and £6,500 a year.

76. The Parliament may make laws conferring original jurisdiction on the High Court in any matter—

- (i) Arising under this Constitution, or involving its interpretation:
- (ii) Arising under any laws made by the Parliament:
- (iii) Of Admiralty and maritime jurisdiction:
- (iv) Relating to the same subject-matter claimed under the laws of different States.

77. With respect to any of the matters mentioned in the last two sections the Parliament may make laws—

- (i) Defining the jurisdiction of any federal court other than the High Court:
- (ii) Defining the extent to which the jurisdiction of any federal court shall be exclusive of that which belongs to or is invested in the courts of the States:
- (iii) Investing any court of a State with federal jurisdiction.

78. The Parliament may make laws conferring rights to proceed against the Commonwealth or a State in respect of matters within the limits of the judicial power.

79. The federal jurisdiction of any court may be exercised by such number of judges as the Parliament prescribes.

80. The trial on indictment of any offence against any law of the Commonwealth shall be by jury, and every such trial shall be held in the State where the offence was committed, and if the offence was not committed within any State the trial shall be held at such place or places as the Parliament prescribes.

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#### CHAPTER IV.—FINANCE AND TRADE.

81. All revenues or moneys raised or received by the Executive Government of the Commonwealth shall form one Consolidated Revenue Fund, to be appropriated for the purposes of the Commonwealth in the manner and subject to the charges and liabilities imposed by this Constitution.

82. The costs, charges, and expenses incident to the collection, management, and receipt of the Consolidated Revenue Fund shall form the first charge thereon; and the revenue of the Commonwealth shall in the first instance be applied to the payment of the expenditure of the Commonwealth.

83. No money shall be drawn from the Treasury of the Commonwealth except under appropriation made by law.

But until the expiration of one month after the first meeting of the Parliament the Governor-General in Council may draw from the Treasury and expend such moneys as may be necessary for the maintenance of any department transferred to the Commonwealth and for the holding of the first elections for the Parliament.

84. When any department of the public service of a State becomes transferred to the Commonwealth, all officers of the department shall become subject to the control of the Executive Government of the Commonwealth.

Any such officer who is not retained in the service of the Commonwealth shall, unless he is appointed to some other office of equal emolument in the public service of the State, be entitled to receive from the State any pension, gratuity, or other compensation, payable under the law of the State on the abolition of his office.

Any such officer who is retained in the service of the Commonwealth shall preserve all his existing and accruing rights, and shall be entitled to retire from office at the time, and on the pension or retiring allowance, which would be permitted by the law of the State if his service with the Commonwealth were a continuation of his service with the State. Such pension or retiring allowance shall be paid to him by the Commonwealth; but the State shall pay to the Commonwealth a part thereof, to be calculated on the proportion which his term of service with the State bears to his whole term of service, and for the purpose of the calculation his salary shall be taken to be that paid to him by the State at the time of the transfer.

Any officer who is, at the establishment of the Commonwealth, in the public service of a State, and who is, by consent of the Governor of the State with the advice of the Executive Council thereof, transferred to the public service of the Commonwealth, shall have the same rights as if he had been an officer of a department transferred to the Commonwealth and were retained in the service of the Commonwealth.

85. When any department of the public service of a State is transferred to the Commonwealth—

- (i) All property of the State of any kind, used exclusively in connexion with the department, shall become vested in the Commonwealth; but, in the case of the departments controlling customs and excise and bounties, for such time only as the Governor-General in Council may declare to be necessary;
- (ii) The Commonwealth may acquire any property of the State, of any kind used, but not exclusively used in connexion with the department; the value thereof shall, if no agreement can be made, be ascertained in, as nearly as may be, the manner in which the value of land, or of an interest in land, taken by the State for public purposes is ascertained under the law of the State in force at the establishment of the Commonwealth;
- (iii) The Commonwealth shall compensate the State for the value of any property passing to the Commonwealth under this section; if no agreement can be made as to the mode of compensation, it shall be determined under laws to be made by the Parliament;
- (iv) The Commonwealth shall, at the date of the transfer, assume the current obligations of the State in respect of the department transferred.

86. On the establishment of the Commonwealth, the collection and control of duties of customs and of excise, and the control of the payment of bounties, shall pass to the Executive Government of the Commonwealth.

87. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, of the net revenue of the Commonwealth from duties of customs and of excise not more than one-fourth shall be applied annually by the Commonwealth towards its expenditure.

The balance shall, in accordance with this Constitution, be paid to the several States, or applied towards the payment of interest on debts of the several States taken over by the Commonwealth.

88. Uniform duties of customs shall be imposed within two years after the establishment of the Commonwealth.

89. Until the imposition of uniform duties of customs—

- (i) The Commonwealth shall credit to each State the revenues collected therein by the Commonwealth.
- (ii) The Commonwealth shall debit to each State—
  - (a) The expenditure therein of the Commonwealth incurred solely for the maintenance or continuance, as at the time of transfer, of any department transferred from the State to the Commonwealth;
  - (b) The proportion of the State, according to the number of its people, in the other expenditure of the Commonwealth.
- (iii) The Commonwealth shall pay to each State month by month the balance (if any) in favour of the State.

90. On the imposition of uniform duties of customs the power of the Parliament to impose duties of customs and of excise, and to grant bounties on the production or export of goods, shall become exclusive.

On the imposition of uniform duties of customs all laws of the several States imposing duties of customs or of excise, or offering bounties on the production or export of goods, shall cease to have effect, but any grant of or agreement for any such bounty lawfully made by or under the authority of the Government of any State shall be taken to be good if made before the thirtieth day of June, one thousand eight hundred and ninety-eight, and not otherwise.

91. Nothing in this Constitution prohibits a State from granting any aid to or bounty on mining for gold, silver, or other metals, nor from granting, with the consent of both Houses of the Parliament of the Commonwealth expressed by resolution, any aid to or bounty on the production or export of goods.

92. On the imposition of uniform duties of customs, trade, commerce, and intercourse among the States, whether by means of internal carriage or ocean navigation, shall be absolutely free.

But notwithstanding anything in this Constitution, goods imported before the imposition of uniform duties of customs into any State, or into any Colony which, whilst the goods remain therein, becomes a State, shall, on thence passing into another State within two

years after the imposition of such duties, be liable to any duty chargeable on the importation of such goods into the Commonwealth, less any duty paid in respect of the goods on their importation.

93. During the first five years after the imposition of uniform duties of customs, and thereafter until the Parliament otherwise provides—

- (i) The duties of customs chargeable on goods imported into a State and afterwards passing into another State for consumption, and the duties of excise paid on goods produced or manufactured in a State and afterwards passing into another State for consumption, shall be taken to have been collected not in the former but in the latter State.
- (ii) Subject to the last sub-section, the Commonwealth shall credit revenue, debit expenditure, and pay balances to the several States as prescribed for the period preceding the imposition of uniform duties of customs.

94. After five years from the imposition of uniform duties of customs, the Parliament may provide, on such basis as it deems fair, for the monthly payment to the several States of all surplus revenue of the Commonwealth.

95. Notwithstanding anything in this Constitution, the Parliament of the State of Western Australia, if that State be an Original State, may, during the first five years after the imposition of uniform duties of customs, impose duties of customs on goods passing into that State and not originally imported from beyond the limits of the Commonwealth; and such duties shall be collected by the Commonwealth.

But any duty so imposed on any goods shall not exceed during the first of such years the duty chargeable on the goods under the law of Western Australia in force at the imposition of uniform duties, and shall not exceed during the second, third, fourth, and fifth of such years respectively, four-fifths, three-fifths, two-fifths, and one-fifth of such latter duty, and all duties imposed under this section shall cease at the expiration of the fifth year after the imposition of uniform duties.

If at any time during the five years the duty on any goods under this section is higher than the duty imposed by the Commonwealth on the importation of the like goods, then such higher duty shall be collected on the goods when imported into Western Australia from beyond the limits of the Commonwealth.

96. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.

97. Until the Parliament otherwise provides, the laws in force in any Colony which has become or becomes a State with respect to the receipt of revenue and the expenditure of money on account of the Government of the Colony, and the review and audit of such receipt and expenditure, shall apply to the receipt of revenue and the expenditure of money on account of the Commonwealth in the State in the same manner as if the Commonwealth, or the Government or an officer of the Commonwealth, were mentioned whenever the Colony, or the Government or an officer of the Colony, is mentioned.

98. The power of the Parliament to make laws with respect to trade and commerce extends to navigation and shipping, and to railways the property of any State.

99. The Commonwealth shall not, by any law or regulation of trade, commerce, or revenue, give preference to one State or any part thereof over another State or any part thereof.

100. The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation.

101. There shall be an Inter-State Commission, with such powers of adjudication and administration as the Parliament deems necessary for the execution and maintenance, within the Commonwealth, of the provisions of this Constitution relating to trade and commerce, and of all laws made thereunder.

102. The Parliament may by any law with respect to trade or commerce forbid, as to railways, any preference or discrimination by any State, or by any authority constituted under a State, if such preference or discrimination is undue and unreasonable, or unjust to any State; due regard being had to the financial responsibilities incurred by any State in connexion with the construction and maintenance of its railways. But no preference or discrimination shall, within the meaning of this section, be taken to be undue and unreasonable, or unjust to any State, unless so adjudged by the Inter-State Commission.

## 103. The members of the Inter-State Commission—

- (i) Shall be appointed by the Governor-General in Council:
- (ii) Shall hold office for seven years, but may be removed within that time by the Governor-General in Council, on an address from both Houses of the Parliament in the same session praying for such removal on the ground of proved misbehaviour or incapacity:
- (iii) Shall receive such remuneration as the Parliament may fix; but such remuneration shall not be diminished during their continuance in office.

104. Nothing in this Constitution shall render unlawful any rate for the carriage of goods upon a railway, the property of a State, if the rate is deemed by the Inter-State Commission to be necessary for the development of the territory of the State, and if the rate applies equally to goods within the State and to goods passing into the State from other States.

105. The Parliament may take over from the States their public debts [as existing at the establishment of the Commonwealth],\* or a proportion thereof according to the respective numbers of their people as shown by the latest statistics of the Commonwealth, and may convert, renew, or consolidate such debts, or any part thereof; and the States shall indemnify the Commonwealth in respect of the debts taken over, and thereafter the interest payable in respect of the debts shall be deducted and retained from the portions of the surplus revenue of the Commonwealth payable to the several States, or if such surplus is insufficient, or if there is no surplus, then the deficiency or the whole amount shall be paid by the several States.

105A.† (1.) *The Commonwealth may make agreements with the States with respect to the public debts of the States, including—*

- (a) *the taking over of such debts by the Commonwealth;*
- (b) *the management of such debts;*
- (c) *the payment of interest and the provision and management of sinking funds in respect of such debts;*
- (d) *the consolidation, renewal, conversion, and redemption of such debts;*
- (e) *the indemnification of the Commonwealth by the States in respect of debts taken over by the Commonwealth; and*
- (f) *the borrowing of money by the States or by the Commonwealth, or by the Commonwealth for the States.*

(2.) *The Parliament may make laws for validating any such agreement made before the commencement of this section.*

(3.) *The Parliament may make laws for the carrying out by the parties thereto of any such agreement.*

(4.) *Any such agreement may be varied or rescinded by the parties thereto.*

(5.) *Every such agreement and any such variation thereof shall be binding upon the Commonwealth and the States parties thereto notwithstanding anything contained in this Constitution or the Constitution of the several States or in any law of the Parliament of the Commonwealth or of any State.*

(6.) *The powers conferred by this section shall not be construed as being limited in any way to the provisions of section one hundred and five of this Constitution.*

## CHAPTER V.—THE STATES.

106. The Constitution of each State of the Commonwealth shall, subject to this Constitution, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be, until altered in accordance with the Constitution of the State.

107. Every power of the Parliament of a Colony which has become or becomes a State, shall, unless it is by this Constitution exclusively vested in the Parliament of the Commonwealth or withdrawn from the Parliament of the State, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be.

\* Under Section 2 of the Constitution Alteration (State Debts) 1909, the words in square brackets are omitted.

† Under Section 2 of the Constitution Alteration (State Debts) 1928, the Constitution was amended by the insertion of this section.

108. Every law in force in a Colony which has become or becomes a State, and relating to any matter within the powers of the Parliament of the Commonwealth, shall, subject to this Constitution, continue in force in the State: and, until provision is made in that behalf by the Parliament of the Commonwealth, the Parliament of the State shall have such powers of alteration and of repeal in respect of any such law as the Parliament of the Colony had until the Colony became a State.

109. When a law of a State is inconsistent with a law of the Commonwealth, the latter shall prevail, and the former shall, to the extent of the inconsistency, be invalid.

110. The provisions of this Constitution relating to the Governor of a State extend and apply to the Governor for the time being of the State, or other chief executive officer or administrator of the government of the State.

111. The Parliament of a State may surrender any part of the State to the Commonwealth; and upon such surrender, and the acceptance thereof by the Commonwealth, such part of the State shall become subject to the exclusive jurisdiction of the Commonwealth.

112. After uniform duties of customs have been imposed, a State may levy on imports or exports, or on goods passing into or out of the State, such charges as may be necessary for executing the inspection laws of the State; but the net produce of all charges so levied shall be for the use of the Commonwealth; and any such inspection laws may be annulled by the Parliament of the Commonwealth.

113. All fermented, distilled, or other intoxicating liquids passing into any State or remaining therein for use, consumption, sale, or storage, shall be subject to the laws of the State as if such liquids had been produced in the State.

114. A State shall not, without the consent of the Parliament of the Commonwealth, raise or maintain any naval or military force, or impose any tax on property of any kind belonging to the Commonwealth, nor shall the Commonwealth impose any tax on property of any kind belonging to a State.

115. A State shall not coin money, nor make anything but gold and silver coin a legal tender in payment of debts.

116. The Commonwealth shall not make any law for establishing any religion, or for imposing any religious observance, or for prohibiting the free exercise of any religion, and no religious test shall be required as a qualification for any office or public trust under the Commonwealth.

117. A subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State.

118. Full faith and credit shall be given, throughout the Commonwealth, to the laws, the public Acts and records, and the judicial proceedings of every State.

119. The Commonwealth shall protect every State against invasion and, on the application of the Executive Government of the State, against domestic violence.

120. Every State shall make provision for the detention in its prisons of persons accused or convicted of offences against the laws of the Commonwealth, and for the punishment of persons convicted of such offences, and the Parliament of the Commonwealth may make laws to give effect to this provision.

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#### CHAPTER VI.—NEW STATES.

121. The Parliament may admit to the Commonwealth or establish new States, and may upon such admission or establishment make or impose such terms and conditions, including the extent of representation in either House of the Parliament, as it thinks fit.

122. The Parliament may make laws for the government of any territory surrendered by any State to and accepted by the Commonwealth, or of any territory placed by the Queen under the authority of and accepted by the Commonwealth, or otherwise acquired by the Commonwealth, and may allow the representation of such territory in either House of the Parliament to the extent and on the terms which it thinks fit.

123. The Parliament of the Commonwealth may, with the consent of the Parliament of a State, and the approval of the majority of the electors of the State voting upon the question, increase, diminish, or otherwise alter the limits of the State, upon such terms and conditions as may be agreed on, and may, with the like consent, make provision respecting the effect and operation of any increase or diminution or alteration of territory in relation to any State affected.

124. A new State may be formed by separation of territory from a State, but only with the consent of the Parliament thereof, and a new State may be formed by the union of two or more States or parts of States, but only with the consent of the Parliaments of the States affected.

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CHAPTER VII.—MISCELLANEOUS.

125. The seat of Government of the Commonwealth shall be determined by the Parliament, and shall be within territory which shall have been granted to or acquired by the Commonwealth, and shall be vested in and belong to the Commonwealth, and shall be in the State of New South Wales, and be distant not less than one hundred miles from Sydney.

Such territory shall contain an area of not less than one hundred square miles, and such portion thereof as shall consist of Crown lands shall be granted to the Commonwealth without any payment therefor.

The Parliament shall sit at Melbourne until it meet at the Seat of Government.

126. The Queen may authorize the Governor-General to appoint any person, or any persons jointly or severally, to be his deputy or deputies within any part of the Commonwealth, and in that capacity to exercise during the pleasure of the Governor-General such powers and functions of the Governor-General as he thinks fit to assign to such deputy or deputies, subject to any limitations expressed or directions given by the Queen; but the appointment of such deputy or deputies shall not affect the exercise by the Governor-General himself of any power or function.

127. In reckoning the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, *aboriginal natives shall not be counted.*

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CHAPTER VIII.—ALTERATION OF THE CONSTITUTION.

128. This Constitution shall not be altered except in the following manner:—

The proposed law for the alteration thereof must be passed by an absolute majority of each House of the Parliament, and not less than two nor more than six months after its passage through both Houses the proposed law shall be submitted in each State to the electors qualified to vote for the election of members of the House of Representatives.

But if either House passes any such proposed law by an absolute majority, and the other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, and if after an interval of three months the first-mentioned House in the same or the next session again passes the proposed law by an absolute majority with or without any amendment which has been made or agreed to by the other House, and such other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, the Governor-General may submit the proposed law as last proposed by the first-mentioned House, and either with or without any amendments subsequently agreed to by both Houses, to the electors in each State qualified to vote for the election of the House of Representatives.

When a proposed law is submitted to the electors the vote shall be taken in such manner as the Parliament prescribes. But until the qualification of electors of members of the House of Representatives becomes uniform throughout the Commonwealth, only one-half the electors voting for and against the proposed law shall be counted in any State in which adult suffrage prevails.

And if in a majority of the States a majority of the electors voting approve the proposed law, and if a majority of all the electors voting also approve the proposed law, it shall be presented to the Governor-General for the Queen's assent.

No alteration diminishing the proportionate representation of any State in either House of the Parliament, or the minimum number of representatives of a State in the House of Representatives, or increasing, diminishing, or otherwise altering the limits of the State, or in any manner affecting the provisions of the Constitution in relation thereto, shall become law unless the majority of the electors voting in that State approve the proposed law.

## SCHEDULE.

## OATH.

I, *A.B.*, do swear that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law. So HELP ME GOD!

## AFFIRMATION.

I, *A.B.*, do solemnly and sincerely affirm and declare that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law.

(NOTE.—*The name of the King or Queen of the United Kingdom of Great Britain and Ireland for the time being is to be substituted from time to time.*)

3. **The Royal Proclamation.**—The preceding Act received the Royal assent on the 9th July, 1900. This made it lawful to declare that the people of Australia should be united in a Federal Commonwealth. This proclamation, made on the 17th September, 1900, constituted the Commonwealth as from the 1st January, 1901; it read as follows:—

BY THE QUEEN.

A PROCLAMATION.

(Signed) VICTORIA R.

WHEREAS by an Act of Parliament passed in the Sixty-third and Sixty-fourth Years of Our Reign, intituled "An Act to constitute the Commonwealth of *Australia*," it is enacted that it shall be lawful for the Queen, with the advice of the Privy Council, to declare by Proclamation, that, on and after a day therein appointed, not being later than One year after the passing of this Act, the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland*, and *Tasmania*, and also, if Her Majesty is satisfied that the people of *Western Australia* have agreed thereto, of *Western Australia*, shall be united in a Federal Commonwealth under the name of the Commonwealth of *Australia*.

And whereas We are satisfied that the people of *Western Australia* have agreed thereto accordingly.

We therefore, by and with the advice of Our Privy Council, have thought fit to issue this Our Royal Proclamation, and We do hereby declare that on and after the First day of *January* One thousand nine hundred and one, the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland*, *Tasmania*, and *Western Australia* shall be united in a Federal Commonwealth under the name of the Commonwealth of *Australia*.

Given at Our Court at *Balmoral* this Seventeenth day of *September*, in the Year of Our Lord One thousand nine hundred, and in the Sixty-fourth Year of Our Reign.

GOD SAVE THE QUEEN.

### § 7. The External Territories of Australia.

1. **Transfer of Norfolk Island.**—In 1856, Norfolk Island was created a distinct and separate settlement under the jurisdiction of New South Wales. Later, in 1896, it was made a dependency under the Governor of that colony and finally by the passage of the Norfolk Island Act 1913 it was accepted as a Territory of the Commonwealth of Australia. The island is situated in latitude 29° 3' 3" S., longitude 167° 57' 5" E., and comprises an area of 8,528 acres.

2. **Transfer of British New Guinea or Papua.**—Under the administration of the Commonwealth, but not included in it, is British New Guinea or Papua, finally annexed by the British Government in 1884. This Territory was for a number of years administered by the Queensland Government, but was transferred to the Commonwealth by proclamation on 1st September, 1906, under the authority of the Papua Act (Commonwealth) of 16th November, 1905. The area of Papua is about 90,540 square miles.

3. **Territory of New Guinea.**—In 1919, it was agreed by the Principal Allied and Associated Powers that a mandate should be conferred on Australia for the government of the former German territories and islands situated in latitude between the Equator and 8° S., and in longitude between 141° E. and 159° 25' E. The mandate was issued

by the League of Nations on 17th December, 1920. The Governor-General of the Commonwealth was authorized to accept the mandate by the New Guinea Act 1920, which also declared the area to be a Territory under the authority of the Commonwealth by the name of the Territory of New Guinea. The Territory comprises about 93,000 square miles, and the administration under the mandate dated from 9th May, 1921. New Guinea is now administered under a Trusteeship Agreement with the United Nations, approved 13th December, 1946.

4. **Nauru.**—In 1919, the Governments of the United Kingdom, Australia and New Zealand entered into an agreement to make provision for the exercise of the mandate conferred on the British Empire for the administration of the island of Nauru, and for the mining of the phosphate deposits thereon. The island is situated in latitude  $0^{\circ} 32'$  south of the Equator and longitude  $166^{\circ} 55'$  east of Greenwich, and comprises about 5,263 acres. The agreement provided that the administration of the island should be vested in an administrator, the first appointment to be made by the Commonwealth Government, and thereafter in such manner as the three Governments decided. The agreement was approved by the Commonwealth Parliament in the Nauru Island Agreement Act 1919, and a supplementary agreement of 30th May, 1923, which gave the Government immediately responsible for the administration greater powers of control over the Administrator, was approved in 1932. The administration under the mandate operated from 17th December, 1920, until 1st November, 1947, and so far the administrators have been appointed by the Commonwealth Government. As with the Territory of New Guinea, Nauru is now administered under a Trusteeship Agreement with the United Nations.

5. **Territory of Ashmore and Cartier Islands.**—By Imperial Order in Council, dated 23rd July, 1931, Ashmore Islands, known as Middle, East and West Islands, and Cartier Island, situated in the Indian Ocean off the north-west coast of Australia, were placed under the authority of the Commonwealth. The islands were accepted by the Commonwealth in the Ashmore and Cartier Islands Acceptance Act 1933 under the name of the Territory of Ashmore and Cartier Islands on 10th May, 1934. The Act authorized the Governor of Western Australia to make ordinances having the force of law in and in relation to the Territory. An amendment to the Act in July, 1938, annexed the islands to the Northern Territory, whose laws, ordinances and regulations, wherever applicable, thereupon applied.

6. **Australian Antarctic Territory.**—An Imperial Order in Council of 7th February, 1933, placed under Australian authority "all the islands and territories other than Adélie Land which are situated south of the 60th degree of South Latitude and lying between the 160th degree of East-Longitude and the 45th degree of East Longitude."

The Order came into force with a proclamation issued by the Governor-General on 24th August, 1936, after the Commonwealth Parliament had passed the Australian Antarctic Territory Acceptance Act on 13th June, 1933. The boundaries of Adélie Land were definitely fixed by a decree of 1st April, 1938, as latitude  $60^{\circ}$  S., longitude  $136^{\circ}$  E. and longitude  $142^{\circ}$  E.

7. **Territory of Heard and McDonald Islands.**—Heard and McDonald Islands, about 2,500 miles south-west of Fremantle, were transferred from United Kingdom to Australian control as from 26th December, 1947. The laws of the Australian Capital Territory were declared to be in force in the Territory of Heard and McDonald Islands by the Heard and McDonald Islands Act 1953.

8. **Territory of Cocos (Keeling) Islands.**—The Cocos (Keeling) Islands Act 1955 provided for the acceptance of the Cocos Islands, in the Indian Ocean, as a Territory under the authority of the Commonwealth of Australia and was parallel to an Act of the United Kingdom Parliament transferring authority over the islands to the Commonwealth. Consequent on the passing of these Acts Her Majesty, by Order in Council, specified 23rd November, 1955, as the date of transfer. From that date the islands came under Australian administration and an Official Representative of Australia was appointed to take charge of the local administration of the islands.

9. **Territory of Christmas Island.**—The Christmas Island Act 1958 provided for the acceptance of Christmas Island, in the Indian Ocean, as a Territory under the authority of the Commonwealth of Australia. Complementary legislation having been passed by the Parliament of the United Kingdom, the island was transferred to the Australian administration on 1st October, 1958 and an Official Representative was appointed to administer the Territory.

## CHAPTER II.

## PHYSIOGRAPHY.

## § 1. General Description of Australia.

1. *Geographical Position.*—(i) *General.* The Australian Commonwealth, which includes the island continent of Australia proper and the island of Tasmania, is situated in the Southern Hemisphere, and comprises in all an area of about 2,974,581 square miles, the mainland alone containing about 2,948,366 square miles. Bounded on the west and east by the Indian and Pacific Oceans respectively, it lies between longitudes 113° 9' E. and 153° 39' E., while its northern and southern limits are the parallels of latitude 10° 41' S. and 43° 39' S., or, excluding Tasmania, 39° 8' S. On its north are the Timor and Arafura Seas and Torres Strait, on its south the Southern Ocean. The extreme points are Steep Point on the west, Cape Byron on the east, Cape York on the north, and South-East Cape or, if Tasmania be excluded, Wilson's Promontory, on the south.

(ii) *Tropical and Temperate Regions.* Of the total area of Australia, nearly 39 per cent. lies within the tropics. Assuming, as is usual, that the latitude of the Tropic of Capricorn is 23° 30' S., the areas within the tropical and temperate zones are approximately as follows:—

## AUSTRALIA: AREAS OF TROPICAL AND TEMPERATE REGIONS.

(Square miles.)

Area.	N.S.W. (a)	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	N. Terr.	Total.
Within Tropical Zone ..			359,000		364,000		426,320	1,149,320
„ Temperate Zone	310,372	87,884	311,500	380,070	611,920	26,215	97,300	1,825,261
Total Area ..	310,372	87,884	670,500	380,070	975,920	26,215	523,620	2,974,581

(a) Includes Australian Capital Territory (939 square miles).

Fifty-four per cent. of Queensland lies within the tropical zone and 46 per cent. in the temperate zone; 37 per cent. of Western Australia is tropical and 63 per cent. temperate; while 81 per cent. of the Northern Territory is tropical and 19 per cent. temperate. All of the remaining States lie within the temperate zone. The tropical part of Australia thus comprises about 39 per cent. of the whole of the continent, and about 53 per cent. of the three territories which have areas within the tropical zone.

2. *Area of Australia compared with Areas of other Countries.*—The area of Australia is almost as great as that of the United States of America, four-fifths of that of Canada, nearly three-quarters of the whole area of Europe, and about 25 times that of Great Britain and Ireland. The areas of Australia and of certain other countries are shown in the table on the following page.

AREA OF AUSTRALIA AND OF OTHER COUNTRIES, *circa* 1956.

('000 square miles.)

Country.	Area.	Country.	Area.
<b>Continental Divisions—</b>		<b>Africa—<i>continued.</i></b>	
Europe (a) .. .. .	1,903	Rhodesia and Nyasaland Federation .. .. .	488
Asia (a) .. .. .	10,494	Angola .. .. .	481
U.S.S.R. (Europe and Asia)	8,650	Union of South Africa .. .. .	472
Africa .. .. .	11,695	Ethiopia and Eritrea .. .. .	457
North and Central America and West Indies .. .. .	9,354	Egypt .. .. .	386
South America .. .. .	6,856	Nigeria and Protectorate (b) .. .. .	373
Oceania .. .. .	3,304	Tanganyika Territory .. .. .	363
<i>Total, excluding Arctic and Antarctic Conts. ..</i>	<i>52,256</i>	South-West Africa .. .. .	318
<b>Europe (a)—</b>		Mozambique .. .. .	298
France .. .. .	213	Bechuanaland Protectorate .. .. .	275
Spain (incl. possessions) .. .. .	194	Madagascar .. .. .	228
Sweden .. .. .	174	Kenya Colony and Protectorate .. .. .	225
Germany .. .. .	137	Other .. .. .	1,100
Finland .. .. .	130	<i>Total .. .. .</i>	<i>11,695</i>
Norway .. .. .	125	<b>North and Central America—</b>	
Poland .. .. .	120	Canada .. .. .	3,851
Italy .. .. .	116	United States of America .. .. .	3,022
Yugoslavia .. .. .	99	Alaska .. .. .	586
United Kingdom .. .. .	94	Greenland .. .. .	840
Romania .. .. .	92	Mexico .. .. .	760
Other .. .. .	409	Nicaragua .. .. .	57
<i>Total (a) .. .. .</i>	<i>1,903</i>	Cuba .. .. .	44
<b>Asia (a)—</b>		Honduras .. .. .	43
China, Mainland .. .. .	3,769	Other .. .. .	151
India and Nepal .. .. .	1,270	<i>Total .. .. .</i>	<i>9,354</i>
Iran .. .. .	629	<b>South America—</b>	
Saudi Arabia .. .. .	618	Brazil .. .. .	3,287
Mongolian People's Republic .. .. .	591	Argentina .. .. .	1,073
Indonesia .. .. .	576	Peru .. .. .	482
Pakistan .. .. .	365	Colombia (excl. of Panama) .. .. .	440
Turkey .. .. .	300	Bolivia .. .. .	424
Burma .. .. .	262	Venezuela .. .. .	352
Afghanistan .. .. .	251	Chile .. .. .	286
Thailand .. .. .	198	Paraguay .. .. .	157
Iraq .. .. .	172	Ecuador .. .. .	105
Other .. .. .	1,493	Other .. .. .	250
<i>Total (a) .. .. .</i>	<i>10,494</i>	<i>Total .. .. .</i>	<i>6,856</i>
<b>U.S.S.R. .. .. .</b>	<b>8,650</b>	<b>Oceania—</b>	
<b>Africa—</b>		Commonwealth of Australia .. .. .	2,975
French West Africa .. .. .	1,789	New Zealand .. .. .	104
French Equatorial Africa .. .. .	969	New Guinea (c) .. .. .	93
Sudan .. .. .	968	Papua .. .. .	91
Algeria .. .. .	920	Other .. .. .	41
Belgian Congo .. .. .	906	<i>Total .. .. .</i>	<i>3,304</i>
Libya .. .. .	679		

(a) Excludes U.S.S.R., shown below.

(b) Includes British Cameroons.

(c) Australian Trust Territory.

The areas shown in the table are obtained from the *Demographic Yearbook, 1957*, published by the Statistical Office of the United Nations and the countries have been arranged in accordance with the continental groups used therein.

3. Areas of States and Territories, Coastal Configuration and Standard Times.—As already stated, Australia consists of six States and the Northern and Australian Capital Territories. Particulars of areas, coastline and standard times are shown in the following table:—

**AUSTRALIA: AREAS OF STATES AND TERRITORIES, COASTLINE AND STANDARD TIMES.**

State or Territory.	Area.	Proportion of Total Area.	Coastline.	Area per Mile of Coastline.	Standard Times.	
					Meridian Selected.	Ahead of G.M.T.
	Sq. miles.	%	Miles.	Sq. miles.		Hours.
New South Wales ..	309,433	10.40	(a) 700	(a) 443	150° E.	10
Victoria ..	87,884	2.96	680	129	150° E.	10
Queensland ..	670,500	22.54	3,000	223	150° E.	10
South Australia ..	380,070	12.78	1,540	247	142°30'E.	9½
Western Australia ..	975,920	32.81	4,350	224	120° E.	8
Northern Territory ..	523,620	17.60	1,040	503	142°30'E.	9½
Australian Capital Territory ..	939	0.03	..	..	150° E.	10
<i>Mainland</i> .. ..	<i>2,948,366</i>	<i>99.12</i>	<i>11,310</i>	<i>261</i>	..	..
Tasmania .. ..	26,215	0.88	900	29	150° E.	10
<b>Australia</b> ..	<b>2,974,581</b>	<b>100.00</b>	<b>12,210</b>	<b>244</b>	..	..

(a) Includes Australian Capital Territory.

There are few striking features in the configuration of the coast; the most remarkable indentations are the Gulf of Carpentaria on the north and the Great Australian Bight on the south. The Cape York Peninsula on the extreme north is the only other remarkable feature in the outline. In Official Year Book No. 1 an enumeration was given of the features of the coastline of Australia (*see* pages 60–68).

Prior to 1895, the official time adopted in the several colonies was for most purposes the mean solar time of the capital city of each. In 1894 and 1895, after several conferences had been held, legislation was enacted by each of the colonies whereby the mean solar times of the meridians of east longitude 120° (Western Australia), 135° (South Australia and Northern Territory) and 150° (Queensland, New South Wales, Victoria and Tasmania) were adopted. In 1898, however, the South Australian legislature amended its earlier provision and adopted the mean solar time of the meridian 142° 30' E. longitude as the standard time for that colony. For further information on this subject, *see* Official Year Book No. 39, page 65.

4. Geographical Features of Australia.—(i) *General*. The following description is only a broad summarization of the main physical characteristics of the Australian continent. For greater detail of particular geographical elements, earlier issues of the Official Year Book should be consulted. The list of special articles, etc., at the end of this volume indicates the nature of the information available and its position in the various issues.

(ii) *Orography of Australia*. (a) *General Description of the Surface*. Owing to the absence of any very high mountain chains, and to the great depression in the centre of Australia, the average elevation of the Australian continent above the level of the surrounding oceans is less than that of any of the other continents. Three-quarters of the land-mass lies between the 600 and 1,500 feet contours in the form of a huge plateau.

A section through the continent from east to west, at the point of its greatest breadth, shows first a narrow belt of coastal plain. This plain, extending north and south along the whole eastern coast, is well watered by rivers. It is of variable width, seldom more than sixty or seventy miles, and occasionally only a few miles, the average being roughly about forty to fifty miles. From this plain, the Great Dividing Range, extending from the north of Queensland to the south of New South Wales, and thence sweeping westward through Victoria, rises, often abruptly, and frequently presents bold escarpments on its eastern face. The descent on its western slopes is gradual, until, in the country to the north of Spencer's Gulf, the plain is not above sea-level and occasionally even below it. Thence there is another almost imperceptible rise until the mountain ranges of Western Australia are reached, and beyond these lies another coastal plain.

The great central plain or plateau is the most distinctive feature of the Australian continent and its climatic peculiarities can probably be largely ascribed thereto.

(b) *Mountain Systems.* The main mountain feature of Australia is the Great Dividing Range, which runs along the whole eastern coast of the continent and can be traced over the islands of Torres Strait to New Guinea, while, in the south, one branch sweeps westwards towards the boundary of Victoria and South Australia, and the other, the main branch, terminates in Tasmania.

This mountain system is at no place more than 250 miles from the eastern coastline and it approaches to less than 30 miles. On the whole, it is much closer to the coast in both New South Wales and Victoria than it is in Queensland, the corresponding average distances being about 70, 65 and 130 miles respectively. There is no connexion between the mountains of the eastern and other States of Australia.

The mountains of Australia are relatively low. Thus, in Queensland, the Great Dividing Range reaches a height above sea-level of less than 5,500 feet, the highest peak being Mount Bartle Frere. Mount Kosciusko, in New South Wales, is only about 7,300 feet, and Mount Bogong, in Victoria, about 6,500 feet high. In South Australia and Western Australia, heights of three and four thousand feet are attained. In Tasmania the greatest height is only a little more than 5,000 feet. The fact that there are no high mountains in Australia is also of considerable importance in considering the climate of Australia.

It may be of interest to observe that at one time Tasmania was probably connected with the mainland. As the Great Dividing Range can, in the north, be traced from Cape York across Torres Strait to New Guinea, so its main axis can be similarly followed across the shallow waters of Bass Strait and its islands from Wilson's Promontory to Tasmania, which may be said to be completely occupied by ramifications of the chain. The central part of the island is occupied by an elevated plateau, roughly triangular in shape, and presenting bold fronts to the east, west and north. This does not extend in any direction more than about 60 miles. The plateau rests upon a more extensive tableland, the contour of which closely follows the coastline, and occasionally broadens out into low-lying tracts not much above sea-level. The extreme south of the island is rugged in character.

(iii) *Hydrology of Australia.* (a) *Rainfall.* On the whole, Australia is a country with a limited rainfall. This is immediately evident on studying its river systems, its lakes, and its artesian areas. Its one large river system is that of the Murray and Darling Rivers, of which the former stream is the larger and more important. Many of the rivers of the interior run only after heavy rains. Depending almost entirely on rainfall, a consequence of the absence of high mountains, they drain large areas with widely varying relation as between rainfall and flow. Thus it has been estimated that not more than 10 per cent. of the rainfall on the catchment area of the Darling River above Bourke (New South Wales) discharges itself past that town. The rate of fall is often very slight.

(b) *Rivers.* The rivers of Australia may be divided into two major classes, those of the coastal plains with moderate rates of fall; and those of the central plains with very slight fall. Of the former not many are navigable for any distance from their mouths, and bars make many of them difficult of access or inaccessible from the sea.

The two longest rivers of the northern part of the eastern coast are the Burdekin, discharging into Upstart Bay, with a catchment area of 53,500 square miles, and the Fitzroy, which reaches the sea at Keppel Bay and drains about 55,600 square miles.

The Hunter is the largest coastal river of New South Wales, draining about 11,000 square miles before it reaches the sea at Newcastle. The Murray River, with its great tributary the Darling, drains a considerable part of Queensland, the major part of New South Wales and a large part of Victoria. It debouches into the arm of the sea known as Lake Alexandrina, on the eastern side of the South Australian coast. The total length of the Murray is about 1,600 miles, 400 being in South Australia and 1,200 constituting the boundary between New South Wales and Victoria. The total length of the Darling-Murray from the source of the Darling to the mouth of the Murray is about 2,300 miles. In good seasons the river is navigable for a considerable proportion of its length.

The rivers of the north-west coast of Australia (Western Australia) are of considerable size, e.g., the Murchison, Gascoyne, Ashburton, Fortesque, De Grey, Fitzroy, Drysdale and Ord. So also are those in the Northern Territory, e.g., the Victoria and Daly. The former of these, estimated to drain 90,000 square miles, is said to be navigable for 50 miles.

The rivers on the Queensland side of the Gulf of Carpentaria, such as the Gregory, Leichhardt, Cloncurry, Gilbert and Mitchell, are also of considerable size.

Owing to the small amount of fall of many of the interior rivers, they may flood hundreds of miles of country in wet seasons, while in dry seasons they form a mere succession of waterholes or are entirely dry. It is this fact that explains the apparently conflicting reports of the early explorers, one regarding the interior as an inland sea, and another as a desert.

The rivers of Tasmania have short and rapid courses, as might be expected from the configuration of the territory.

(c) *Lakes.* The "lakes" of Australia may be divided into three classes, true permanent lakes; lakes which, being very shallow, become mere morasses in dry seasons or even dry up and finally present a cracked surface of salt and dry mud; and lakes which are really inlets of the ocean, opening out into a lake-like expanse.

The second class is the only one which seems to demand special mention. These are a characteristic of the great central plain of Australia. Some of them, such as Lakes Torrens, Gairdner, Eyre and Frome, are of considerable extent.

(d) *Artesian Areas.* A considerable tract of the plain country of New South Wales and Queensland carries a water-bearing stratum, usually at a great depth. A large number of artesian bores have been put down, from which there is a considerable flow. These are of great value and render usable large areas which otherwise would be difficult to occupy even for pastoral purposes.

For further information on this subject, see Chapter VIII.—Water Conservation and Irrigation.

5. *Fauna, Flora, Geology and Seismology of Australia.*—Special articles dealing with these features have appeared in previous issues of the Official Year Book, but limits of space preclude their repetition in each volume. The nature and location of these articles can be readily ascertained from the special index preceding the general index at the end of this volume.

## § 2. Climate and Meteorology of Australia.

NOTE.—This Section has been prepared by the Director, Commonwealth Meteorological Bureau, and the various States and Territories have been arranged in the standard order adopted by that Bureau. A special article dealing with droughts in Australia has been included in this issue (see para. 9, page 51).

1. *Introductory.*—Previous issues of the Official Year Book, notably No. 3, pages 79–83, and No. 4, pages 84 and 87, contained outlines of the history of Australian meteorology and the creation and organization of the Commonwealth Bureau of Meteorology. Official Year Book No. 38, pages 30–32, contained paragraphs devoted to (i) Organization of the Meteorological Service; (ii) Meteorological Publications; (iii) Equipment; and (iv) Meteorological Divisions.

By reason of its insular geographical position and the absence of striking physical features, whether in marine gulfs or in important mountains, Australia is, on the whole, less subject to extremes of weather than are regions of similar area in other parts of the globe, and latitude for latitude Australia is generally more temperate.

The average elevation of the surface of the land is low, probably close to 900 feet above the sea. The altitudes range up to a little more than 7,300 feet, hence the Australian climate displays a great many features, from the characteristically tropical to what is essentially alpine, a fact indicated in some measure by the name Australian Alps given to the southern portion of the Great Dividing Range.

On the coast, the rainfall is often abundant and the atmosphere moist, but in some portions of the interior it is very limited, and the atmosphere dry. The distribution of forest, therefore, with its climatic influence, is very uneven. In the interior, in places, there are fine belts of trees, but there are also large areas which are treeless, and here the air is hot and parching in summer. Again, on the coast, even so far south as latitude 35°, the vegetation is tropical in its luxuriance, and to some extent also in character.

2. *Temperature.*—(i) *Effective Temperature.* When a meteorologist speaks of temperature, he means the temperature of the air indicated by a thermometer sheltered from precipitation, from direct rays of the sun and from radiation of heat from the ground

and neighbouring objects, yet freely exposed to the circulation of the air. In other words, he means temperature measured under conditions standardized as nearly as possible in a Stevenson Screen, which is the standard housing for meteorological thermometers.

This shade temperature as measured by a "dry bulb" thermometer shows only the actual temperature experienced by dry inorganic substances, not the *sensible* temperatures felt by organic bodies. In the case of human beings, *sensible* temperature is affected by the rate of conduction of heat to or from the body by moving air and also by the rate of cooling due to evaporation from the skin and respiratory passages. The wind and humidity therefore determine the *sensible* temperature.

The humidity (relative humidity) is determined from the readings of the dry and wet bulb thermometers. Of late years, however, with increasing interest in human comfort in tropical climates, another term, *effective* temperature, has come into use. It may be defined as "the temperature of a still, saturated atmosphere which would on the average produce the same feeling of warmth or cold as the atmosphere in question".\*

The 80° F. isotherm is confined to a very narrow tract of country on the north-west coast of Western Australia. The 75° F. isotherm extends, broadly, from Onslow on the north-west coast of Western Australia to Daly Waters to Camooweal to Moreton in Cape York Peninsula following in a general way the coastline of Northern Australia but from 100 to 300 miles inland.

Later investigations have established "comfort zones"† bounded by limits of effective temperature within which people will feel comfortable. American research workers have determined the following figures ‡:—

#### COMFORT ZONES: EFFECTIVE TEMPERATURES.

Season.	No subjects feel comfortable below—	Fifty per cent. of subjects feel comfortable between—	No subjects feel comfortable above—
Winter.. ..	60° F.	63° and 71° F.	74° F.
Summer .. ..	64° F.	66° and 75° F.	79° F.

Queensland investigators§ in recent years have divided some towns of Queensland into three classes on the basis of deviation from comfort:—

Class 1 (Sub-tropics).—Quite suitable for Caucasian habitation—Rockhampton, Bundaberg, Brisbane, Longreach, Charleville.

Class 2 (Marginal tropics).—Suitable for Caucasian habitation, but requires adaptation in summer—Mackay, Townsville.

Class 3 (Tropics).—(a) Permissible for Caucasian habitation but requires selection and marked adaptation—Cardwell, Cairns, Cloncurry. (b) Not suitable for continuous Caucasian habitation—Cape York, Burketown.

These results of recent years bear out investigations made previously in Australia|| in which the atmospheric vapour pressure was used as a measure of comfort, its value for this purpose being that it has equal effect in both indoor and outdoor climates. The limits of comfort range from 0.2 to 0.5 inch of vapour pressure. After drawing isopleths for effective temperature (not corrected for altitude), mean vapour pressure reduced to a logarithmic scale, and mean wet bulb temperature, it is found that there is close agreement in defining zones of relative discomfort.

(ii) *Seasons.* The Australian seasons are:—Summer, December to February; autumn, March to May; winter, June to August; spring, September to November. In most parts of Australia, January is the hottest month, but in Tasmania and southern Victoria, February is the hottest; in the tropical north, probably because the cooling "monsoon" rains occur in late summer, December is the hottest month, and at Darwin, November.

On a rainfall basis, in the tropical north the year is divisible into "wet" and "dry" seasons, but on the basis of temperatures and physical comfort the "dry" season can be further sub-divided into two parts—"cool dry" and "warm dusty".¶

(a) "*Cool dry*" Season. From May to August. The average maximum temperature ranges from 80° to 85° F., the relative humidity is low and in inland areas cold nights are experienced when the temperature drops to 40° F. The skies generally are cloudless, but in about one year in three during June or July one to two inches of rain fall.

\* Houghton, F. C., Teague, W. W. and Miller, W. E. (1926) Amer. Soc. Heat. Vent. Engrs. † Yaglou, C. P. (1926) J. Industr. Hyg. ‡ Yaglou, C. P. (1927) Ibid. § Lee, D. H. K. Trans. Roy. Soc. Trop. Med. and Hyg. (1940) Vol. XXXII. ¶ Barkley, H. Zones of Relative Physical Comfort in Australia, Met. Bull. 20, 1934. ¶ Maze, W. H. Austr. Geog. June, 1945. Settlement in E. Kimberleys.

(b) "*Warm dusty*" Season. From the end of August, temperatures rise and reach a maximum in October or the beginning of November. Temperatures of over 120° F. have been recorded.

(c) "*Wet*" Season. After the first of the heavy storms, the maximum temperatures fall but still remain high with high relative humidity. At Wyndham during January, 1944, the minimum temperature did not drop below 75° F. for fourteen consecutive days. A maximum of over 100° F. was recorded on each rainless day.

In Central and Northern Australia, during the hottest months, the average temperatures range from 80° to 85° F., whereas in Southern Australia they vary from 65° to 70° F. (*see* maps pages 33, 34).

Throughout Australia, the coldest month is July, when only a very narrow strip of the northern sea-board has an average temperature as high as 75° F. Over the southern half of the continent, July temperatures range from 55° to 45° F. at elevations below 1,500 feet and fall as low as 35° on the Australian Alps (*see* maps pages 35, 36). Here the temperature seldom, if ever, reaches 100° F. even in the hottest of seasons. Hotham Heights (6,100 feet above Mean Sea Level) recorded the highest maximum of 82.0° F. on 20th January, 1935. In winter, readings slightly below zero are occasionally recorded on the extreme heights.

Tasmania, as a whole, enjoys a moderate and equable range of temperature throughout the year, although occasionally hot winds may cause the temperature to rise to 100° F. in the eastern part of the State.

(iii) *Comparisons with other Countries.* In respect of Australian temperatures generally, it may be pointed out that the mean annual isotherm for 70° F. extends in South America and South Africa as far south as latitude 33° S., while in Australia it reaches only as far south as latitude 30° S., thus showing that, on the whole, Australia has, latitude for latitude, a more temperate climate than other places in the Southern Hemisphere.

The comparison is even more favourable when the Northern Hemisphere is included, for in the United States of America the 70° F. isotherm extends in several of the western States as far north as latitude 41° N. In Europe, the same isotherm reaches almost to the southern shores of Spain, passing afterwards, however, along the northern shores of Africa till it reaches the Red Sea, when it bends northward along the eastern shore of the Mediterranean till it reaches Syria. In Asia, nearly the whole of the land area south of latitude 40° N. has a mean annual temperature higher than 70° F.

The extreme range of temperature is less than 100° F. over practically the whole of Australia, that figure being only slightly exceeded at a very few places; it is mostly 70° to 90° F. over inland areas, and somewhat less on the coast. In parts of Asia and North America, the extreme range exceeds 130° and 150° F. in some localities.

Along the northern shores of Australia, the temperatures are very equable. At Darwin, for example, the difference in the means for the hottest and coldest month is only 8.4° F., and the extreme readings, or the highest maximum on record and the lowest minimum, show a difference of under 50° F.

The highest temperature recorded in Australia was 127.5° F. at Cloncurry on 16th January, 1889. The world's highest (136° F.) was recorded at Azizia (Tripoli) on 13th August, 1922. The lowest temperature ever recorded in Australia was -8° F. at Charlotte Pass on 14th June, 1945, and again on 22nd July, 1947, as contrasted with the world's lowest recorded temperature of -90° F. at Verkhojansk (Siberia) on 5th and 7th February, 1892.

A comparison of the mean temperatures and the range from the extreme maximum to the extreme minimum temperatures (in whole degrees) of the capital cities of Australia with those of the main cities of some other countries was presented in tabular form in Official Year Book No. 38, page 42.

(iv) *Hottest and Coldest Parts.* A comparison of the temperatures recorded at coast and inland stations shows that, in Australia, as in other continents, the range increases, within certain limits, with increasing distance from the coast.

In the interior of Australia, and during exceptionally dry summers, the temperature occasionally reaches or exceeds 120° F. in the shade. The hottest area of the continent is situated in the northern part of Western Australia about the Marble Bar and Nullagine goldfields, where the maximum shade temperature during the summer sometimes exceeds 100° F. continuously for days and weeks. The longest recorded period was 160 days from 31st October, 1923 to 7th April, 1924.

The area affected and the period of duration of the longest heat waves in Australia are shown in the map and diagram on page 37.

(v) *Tabulated Data for Selected Climatological Stations in Australia.* Tables showing normal mean temperature, extreme temperatures and normal rainfall for each month for

selected climatological stations in each State and the Northern Territory appeared in Official Year Book No. 40, pages 16–23, and similar data for other selected stations in the Commonwealth in Official Year Book No. 39, pages 41–48. Pages 59–66 of this issue contain this information in respect of Canberra, Darwin and the six State capitals.

(vi) *Frosts*.\* The Observer's Handbook of the Meteorological Office, London, gives the following definition:—"Injury to the tissues of growing plants is not caused until the temperature has fallen considerably below the freezing point of water (32° F.) and a 'ground frost' is regarded as having occurred when the thermometer on the grass has fallen to 30.4° F. or below".

In Australia, this definition is adopted for stations equipped with terrestrial minimum thermometers. However, these are few in number, so although many rainfall observers record "hoar frost" when seen, for statistical purposes a screen temperature of 36° F. is taken as indicating light frosts at ground level. For heavy frosts, a screen temperature of 32° F. is taken.

In America, a "killing" frost is defined as a frost "that is generally destructive of vegetation". A "black frost" is the phenomenon arising out of a combination of low temperature and low humidity causing rupturing of plant cells by expansion, when freezing takes place, of the water which they contain, though frost crystals are not formed on the ground.

The parts of Australia most subject to low temperature are the eastern highlands from about Omeo in Victoria northward to Cambooya and Bybera in Queensland. Most stations in this region experience more than ten nights per month with readings of 32° F. or under for three to five months of the year. In Tasmania, districts on the Central Plateau are subject to such conditions for three to six months of the year. Minimum temperatures of 32° F. are comparatively infrequent in Western Australia except in parts of the south and south-west. In South Australia, the Yongala district is much more subject to such temperatures than other parts of the State. Much of the south-east of Queensland has a higher frequency of such readings than South Australia. Generally speaking, the frequency is controlled mainly by altitude, latitude and, to a lesser degree, by proximity to the sea.

Frosts may occur within a few miles of the coastline over the whole continent, except in the Northern Territory and a considerable area of Northern Queensland. Regions subject to frost in all months of the year comprise portions of the tabelands of New South Wales, the Eastern Highlands and parts of the Central Divide and Western district in Victoria, practically the whole of Tasmania and a small area in the south-west of Western Australia.

A map showing the average annual number of frost-free days (i.e., days on which the temperature does not fall below 36° F.) appears on page 39.

Over most of the interior of the continent, and on the Highlands in Queensland as far north as the Atherton Plateau frosts appear in April and end in September, but they are infrequent in these months. Minimum temperatures of 32° F. are experienced in most of the sub-tropical interior in June and July.

3. *Humidity*.—After temperature, humidity is the most important element of climate, particularly as regards its effects on human comfort, rainfall supply and conservation and related problems.

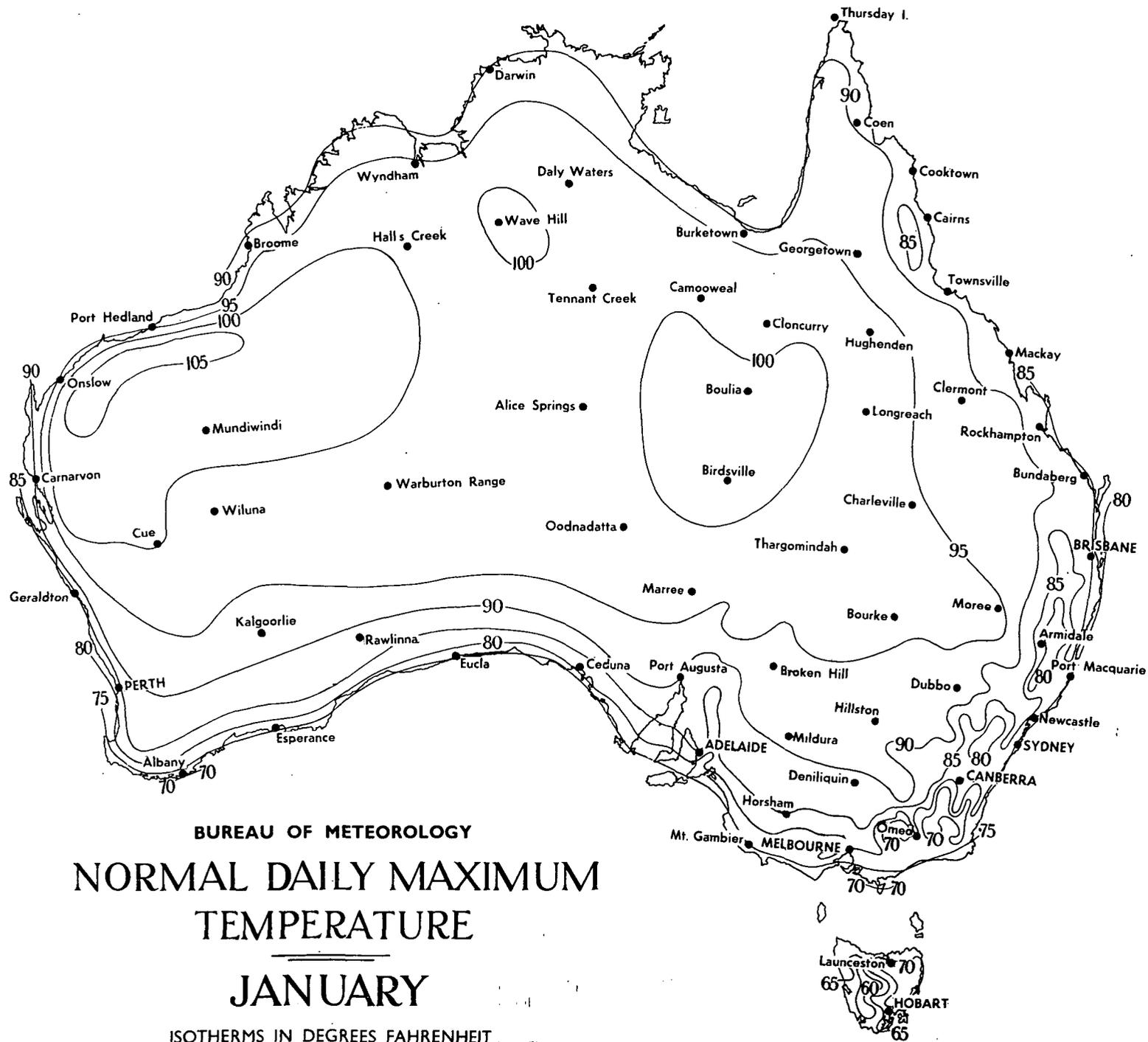
"Vapour pressure" is the pressure exerted by the water vapour in the atmosphere. At any given temperature there is a definite upper limit to the amount of water that can exist as vapour in the atmosphere. When this limit is reached, the air is said to be saturated and the pressure of the water vapour is equal to the "saturation vapour pressure".

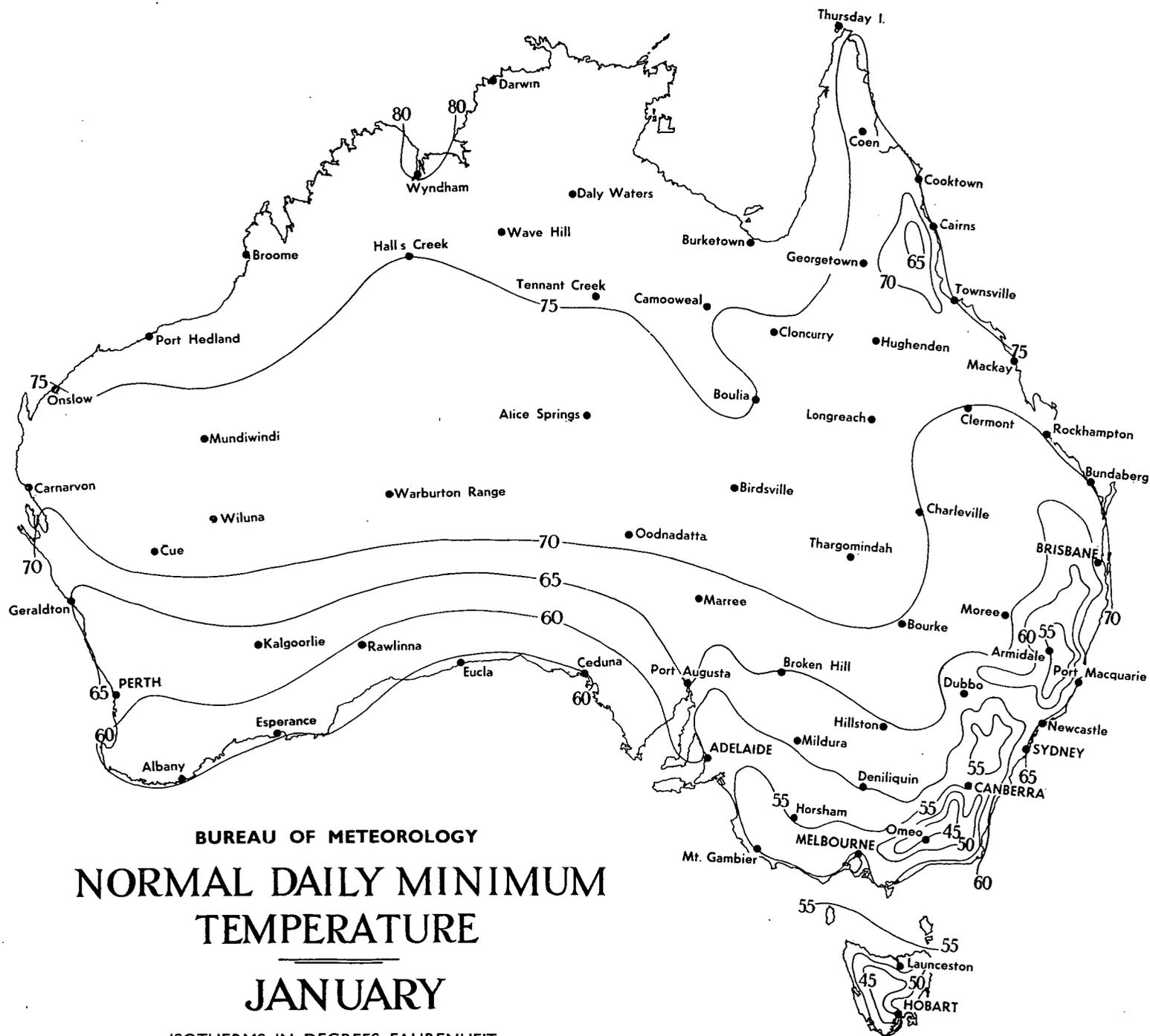
In this publication, the humidity of the air has been expressed by the relative humidity, which is the quotient of the vapour pressure divided by the saturation vapour pressure and multiplied by one hundred. The mean 9 a.m. relative humidity, as well as its highest and lowest recorded mean values at 9 a.m., are shown in the tables of climatological data for the capital cities (*see* pages 59–66). The mean monthly vapour pressure has also been added to these tables.

The annual curve of vapour pressure derived from the normal monthly values for this element is comparable with the maximum and minimum temperature curves, but the relative humidities, consisting as they do of the extremes for each month, do not show the normal annual fluctuation which would be approximately midway between the extremes.

The order of stations in descending values of 9 a.m. vapour pressure is Darwin, Brisbane Sydney, Perth, Melbourne, Adelaide, Canberra, Hobart and Alice Springs, while the relative humidity at 9 a.m. diminishes in the order, Melbourne, Sydney, Darwin, Brisbane, Canberra, Hobart, Perth, Adelaide and Alice Springs.

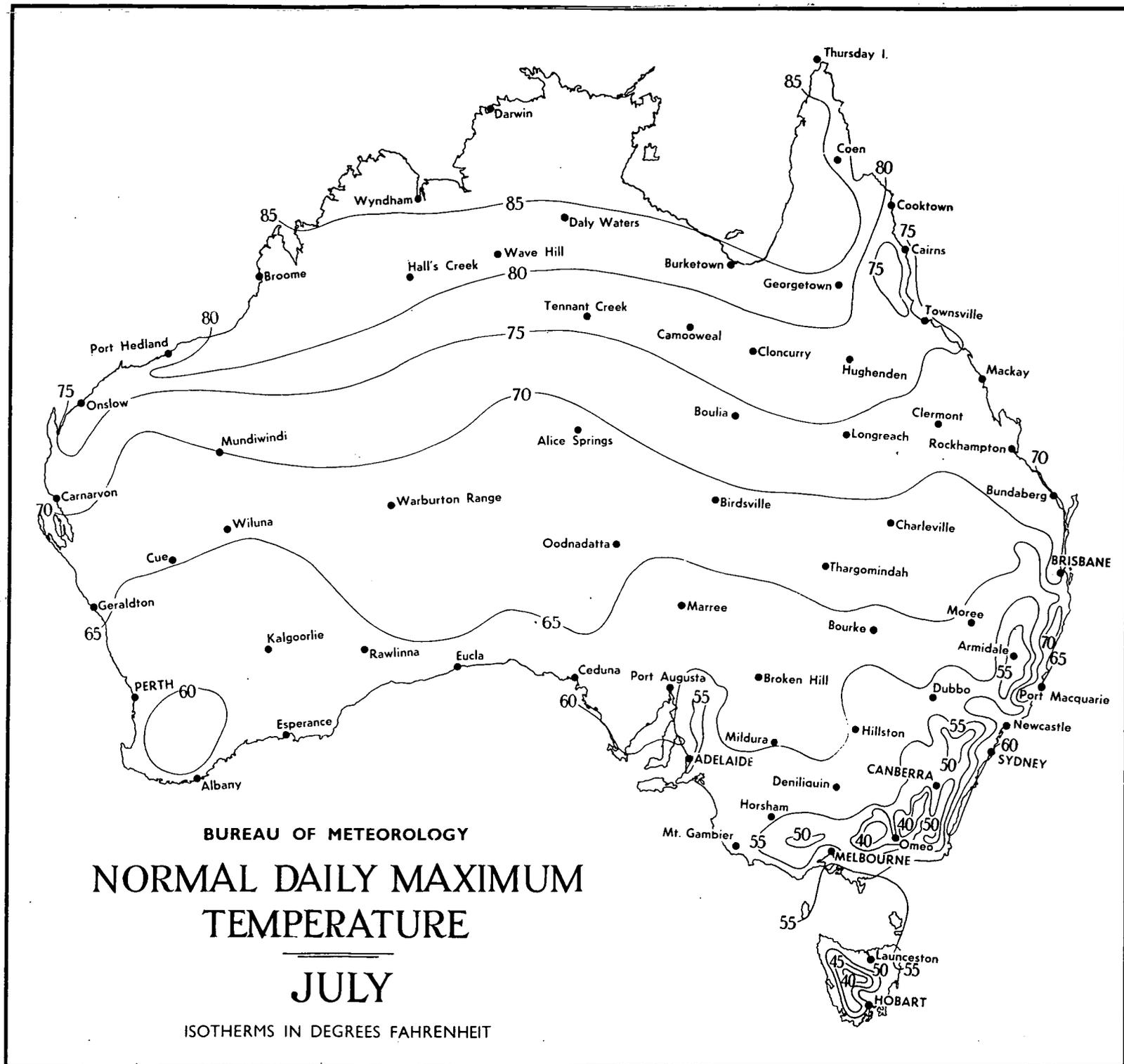
\* Foley, J. C. Frost in the Australian Region (Bull. 32, 1945).





BUREAU OF METEOROLOGY  
**NORMAL DAILY MINIMUM  
 TEMPERATURE**  
**JANUARY**

ISOTHERMS IN DEGREES FAHRENHEIT







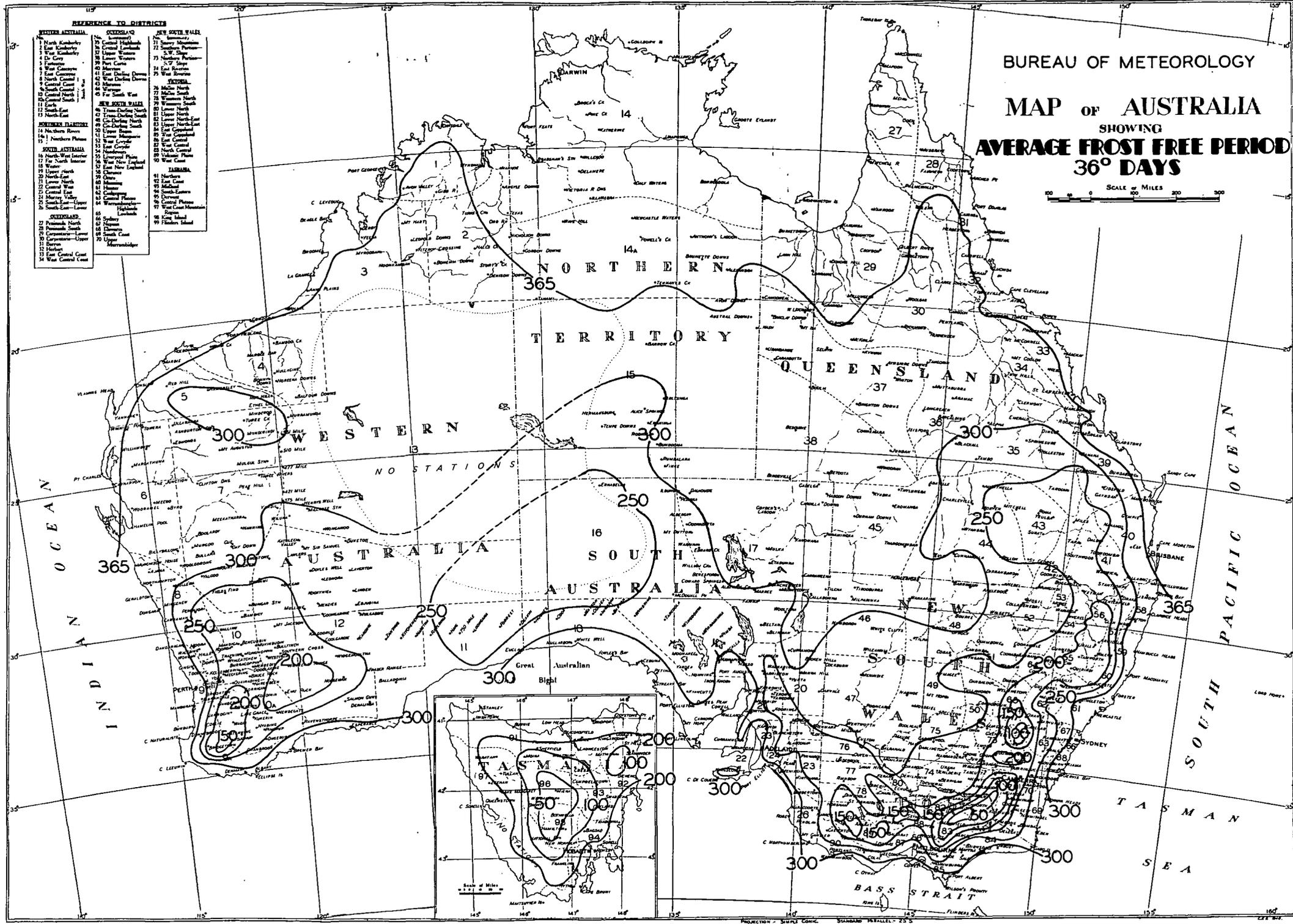


BUREAU OF METEOROLOGY  
**MAP OF AUSTRALIA**  
 SHOWING  
**AVERAGE FROST FREE PERIOD**  
**36° DAYS**

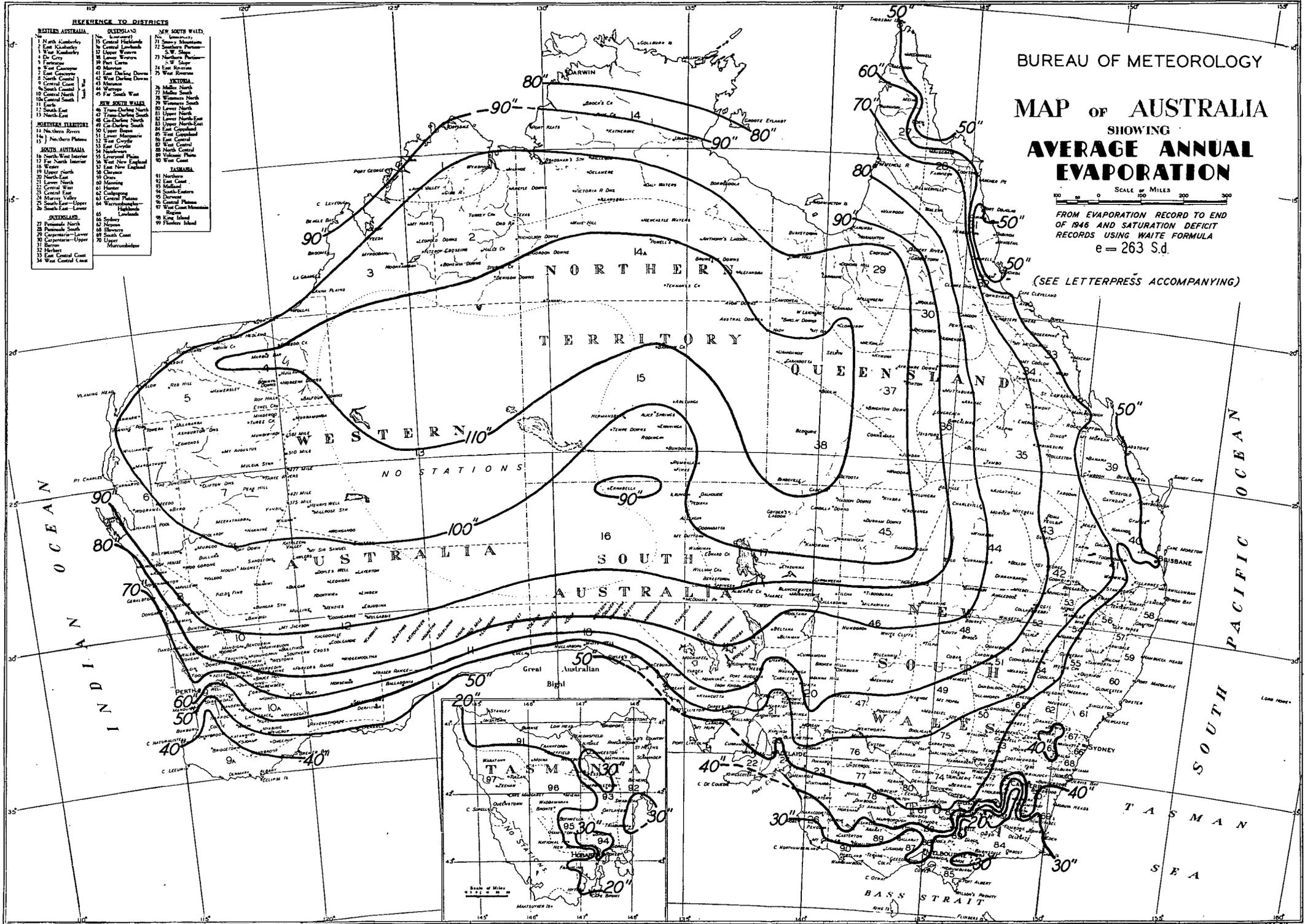
SCALE OF MILES  
 0 100 200 300

REFERENCE TO DISTRICTS

WESTERN AUSTRALIA		TASMANIA	
1 North Kimberley	21 Perth	1 North	11 Hobart
2 East Kimberley	22 Geraldton	2 Midlands	12 Launceston
3 West Kimberley	23 Mandurah	3 South	13 Burnie
4 De Grey	24 South Coast	4 North West	14 Devonport
5 Peel	25 South West	5 West Coast	15 Ulmarra
6 South Coast	26 South West	6 South West	16 Launceston
7 North Coast	27 South West	7 South West	17 Burnie
8 North Coast	28 South West	8 South West	18 Devonport
9 North Coast	29 South West	9 South West	19 Launceston
10 North Coast	30 South West	10 South West	20 Burnie
11 North Coast	31 South West	11 South West	21 Devonport
12 North Coast	32 South West	12 South West	22 Launceston
13 North Coast	33 South West	13 South West	23 Burnie
14 North Coast	34 South West	14 South West	24 Devonport
15 North Coast	35 South West	15 South West	25 Launceston
16 North Coast	36 South West	16 South West	26 Burnie
17 North Coast	37 South West	17 South West	27 Devonport
18 North Coast	38 South West	18 South West	28 Launceston
19 North Coast	39 South West	19 South West	29 Burnie
20 North Coast	40 South West	20 South West	30 Devonport
21 North Coast	41 South West	21 South West	31 Launceston
22 North Coast	42 South West	22 South West	32 Burnie
23 North Coast	43 South West	23 South West	33 Devonport
24 North Coast	44 South West	24 South West	34 Launceston
25 North Coast	45 South West	25 South West	35 Burnie
26 North Coast	46 South West	26 South West	36 Devonport
27 North Coast	47 South West	27 South West	37 Launceston
28 North Coast	48 South West	28 South West	38 Burnie
29 North Coast	49 South West	29 South West	39 Devonport
30 North Coast	50 South West	30 South West	40 Launceston
31 North Coast	51 South West	31 South West	41 Burnie
32 North Coast	52 South West	32 South West	42 Devonport
33 North Coast	53 South West	33 South West	43 Launceston
34 North Coast	54 South West	34 South West	44 Burnie
35 North Coast	55 South West	35 South West	45 Devonport
36 North Coast	56 South West	36 South West	46 Launceston
37 North Coast	57 South West	37 South West	47 Burnie
38 North Coast	58 South West	38 South West	48 Devonport
39 North Coast	59 South West	39 South West	49 Launceston
40 North Coast	60 South West	40 South West	50 Burnie
41 North Coast	61 South West	41 South West	51 Devonport
42 North Coast	62 South West	42 South West	52 Launceston
43 North Coast	63 South West	43 South West	53 Burnie
44 North Coast	64 South West	44 South West	54 Devonport
45 North Coast	65 South West	45 South West	55 Launceston
46 North Coast	66 South West	46 South West	56 Burnie
47 North Coast	67 South West	47 South West	57 Devonport
48 North Coast	68 South West	48 South West	58 Launceston
49 North Coast	69 South West	49 South West	59 Burnie
50 North Coast	70 South West	50 South West	60 Devonport
51 North Coast	71 South West	51 South West	61 Launceston
52 North Coast	72 South West	52 South West	62 Burnie
53 North Coast	73 South West	53 South West	63 Devonport
54 North Coast	74 South West	54 South West	64 Launceston
55 North Coast	75 South West	55 South West	65 Burnie
56 North Coast	76 South West	56 South West	66 Devonport
57 North Coast	77 South West	57 South West	67 Launceston
58 North Coast	78 South West	58 South West	68 Burnie
59 North Coast	79 South West	59 South West	69 Devonport
60 North Coast	80 South West	60 South West	70 Launceston
61 North Coast	81 South West	61 South West	71 Burnie
62 North Coast	82 South West	62 South West	72 Devonport
63 North Coast	83 South West	63 South West	73 Launceston
64 North Coast	84 South West	64 South West	74 Burnie
65 North Coast	85 South West	65 South West	75 Devonport
66 North Coast	86 South West	66 South West	76 Launceston
67 North Coast	87 South West	67 South West	77 Burnie
68 North Coast	88 South West	68 South West	78 Devonport
69 North Coast	89 South West	69 South West	79 Launceston
70 North Coast	90 South West	70 South West	80 Burnie



PROJECTION - SIMPLE CONIC. STANDARD MERIDIAN - 135° E.



BUREAU OF METEOROLOGY  
**MAP OF AUSTRALIA**  
 SHOWING  
**AVERAGE ANNUAL**  
**EVAPORATION**

SCALE OF MILES  
 0 100 200 300

FROM EVAPORATION RECORD TO END OF 1946 AND SATURATION DEFICIT RECORDS USING WAITE FORMULA  
 $e = 263 S.d.$

(SEE LETTERPRESS ACCOMPANYING)

REFERENCE TO DISTRICTS

WESTERN AUSTRALIA		QUEENSLAND		NEW SOUTH WALES	
1 North Kimberley	30 Central Highlands	71 Snowy Mountains			
2 East Kimberley	31 Central Lowlands	72 Snowy Plains			
3 De Grey	32 Upper Western	73 Northern Pastoral			
4 Fortescue	33 Pastoral	74 S.W. Slope			
5 West Coast Range	34 West Darling Downs	75 Western Pastoral			
6 East Coast Range	35 East Darling Downs	76 Western Pastoral			
7 North Coast	36 Darling Downs	77 Western Pastoral			
8 Central Coast	37 Warrego	78 Western Pastoral			
9 South Coast	38 Upper Darling	79 Western Pastoral			
10 Central North	39 Upper Darling	80 Western Pastoral			
11 Central South	40 Upper Darling	81 Western Pastoral			
12 North East	41 Upper Darling	82 Western Pastoral			
NORTHERN TERRITORY		NEW SOUTH WALES		VICTORIA	
13 Northern Rivers	42 Upper Darling	83 Western Pastoral			
14 Northern Pastoral	43 Upper Darling	84 Western Pastoral			
15 Southern Pastoral	44 Upper Darling	85 Western Pastoral			
SOUTH AUSTRALIA		NEW SOUTH WALES		VICTORIA	
16 South West Interior	45 Upper Darling	86 Western Pastoral			
17 Far North Interior	46 Upper Darling	87 Western Pastoral			
18 Water	47 Upper Darling	88 Western Pastoral			
19 Upper North	48 Upper Darling	89 Western Pastoral			
20 North East	49 Upper Darling	90 Western Pastoral			
21 Lower North	50 Upper Darling	91 Western Pastoral			
22 Central West	51 Upper Darling	92 Western Pastoral			
23 Central East	52 Upper Darling	93 Western Pastoral			
24 Murray Valley	53 Upper Darling	94 Western Pastoral			
25 South East - Upper	54 Upper Darling	95 Western Pastoral			
26 South East - Lower	55 Upper Darling	96 Western Pastoral			
27 Barren	56 Upper Darling	97 Western Pastoral			
28 Harbert	57 Upper Darling	98 Western Pastoral			
29 East Central Coast	58 Upper Darling	99 Flinders Island			
30 West Central Coast	59 Upper Darling				
	60 Upper Darling				
	61 Upper Darling				
	62 Upper Darling				
	63 Upper Darling				
	64 Upper Darling				
	65 Upper Darling				
	66 Upper Darling				
	67 Upper Darling				
	68 Upper Darling				
	69 Upper Darling				
	70 Upper Darling				

PROJECTION - SIMPLE CONIC. STANDARD PARALLEL - 25 S.



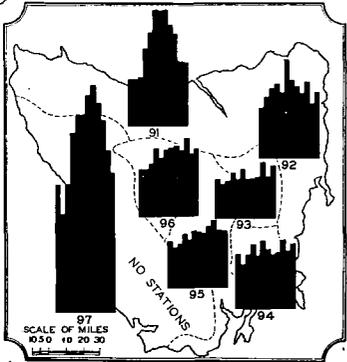
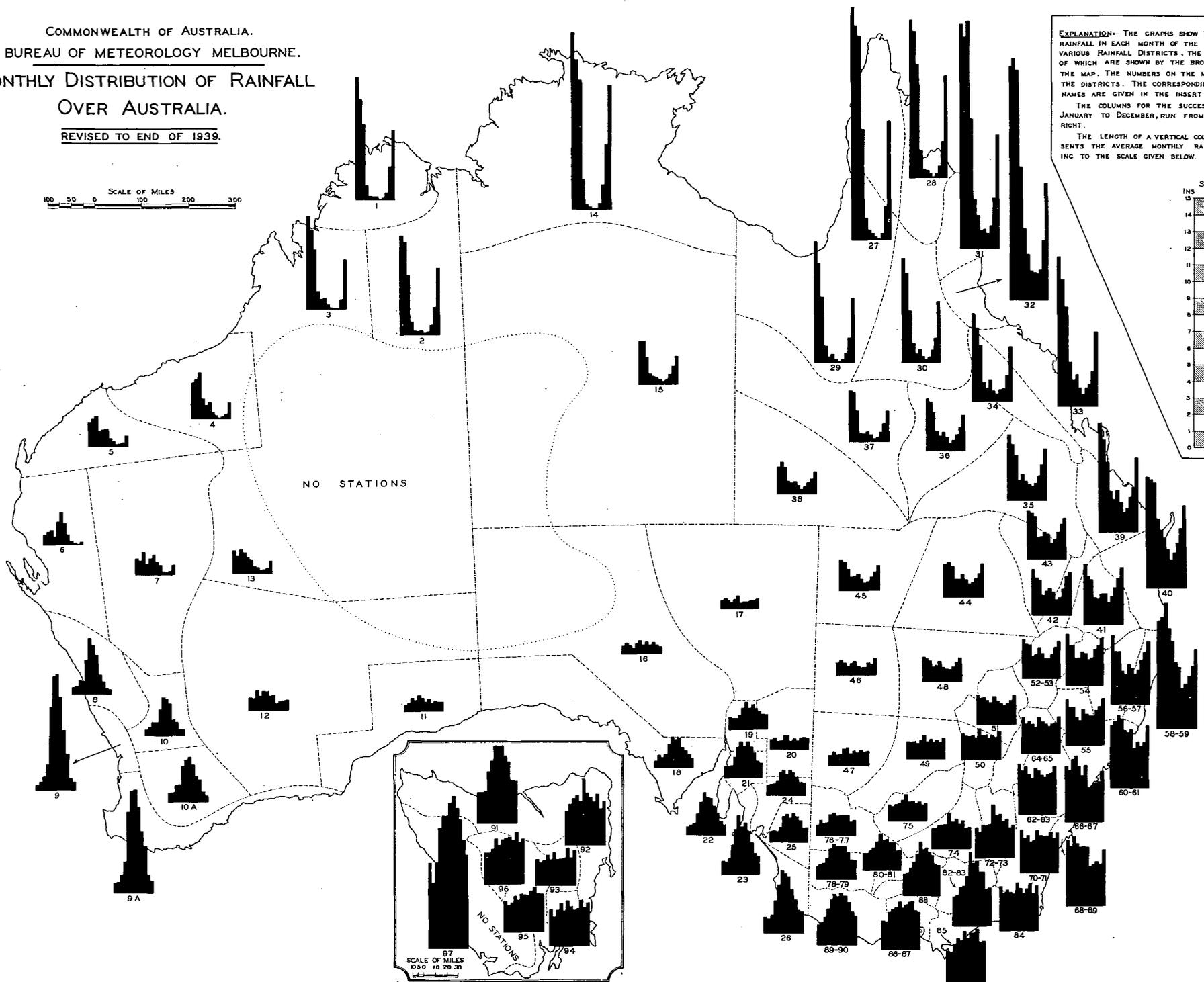
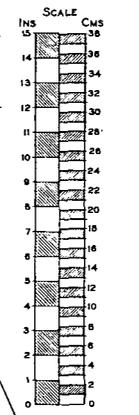
COMMONWEALTH OF AUSTRALIA.  
 BUREAU OF METEOROLOGY MELBOURNE.  
**MONTHLY DISTRIBUTION OF RAINFALL  
 OVER AUSTRALIA.**  
 REVISED TO END OF 1939.

SCALE OF MILES  
 100 50 0 100 200 300

**EXPLANATION**— THE GRAPHS SHOW THE AVERAGE RAINFALL IN EACH MONTH OF THE YEAR IN THE VARIOUS RAINFALL DISTRICTS, THE BOUNDARIES OF WHICH ARE SHOWN BY THE BROKEN LINES ON THE MAP. THE NUMBERS ON THE MAP REFER TO THE DISTRICTS. THE CORRESPONDING DISTRICT NAMES ARE GIVEN IN THE INSERT ON PAGE 49.

THE COLUMNS FOR THE SUCCESSIVE MONTHS, JANUARY TO DECEMBER, RUN FROM LEFT TO RIGHT.

THE LENGTH OF A VERTICAL COLUMN REPRESENTS THE AVERAGE MONTHLY RAINFALL ACCORDING TO THE SCALE GIVEN BELOW.



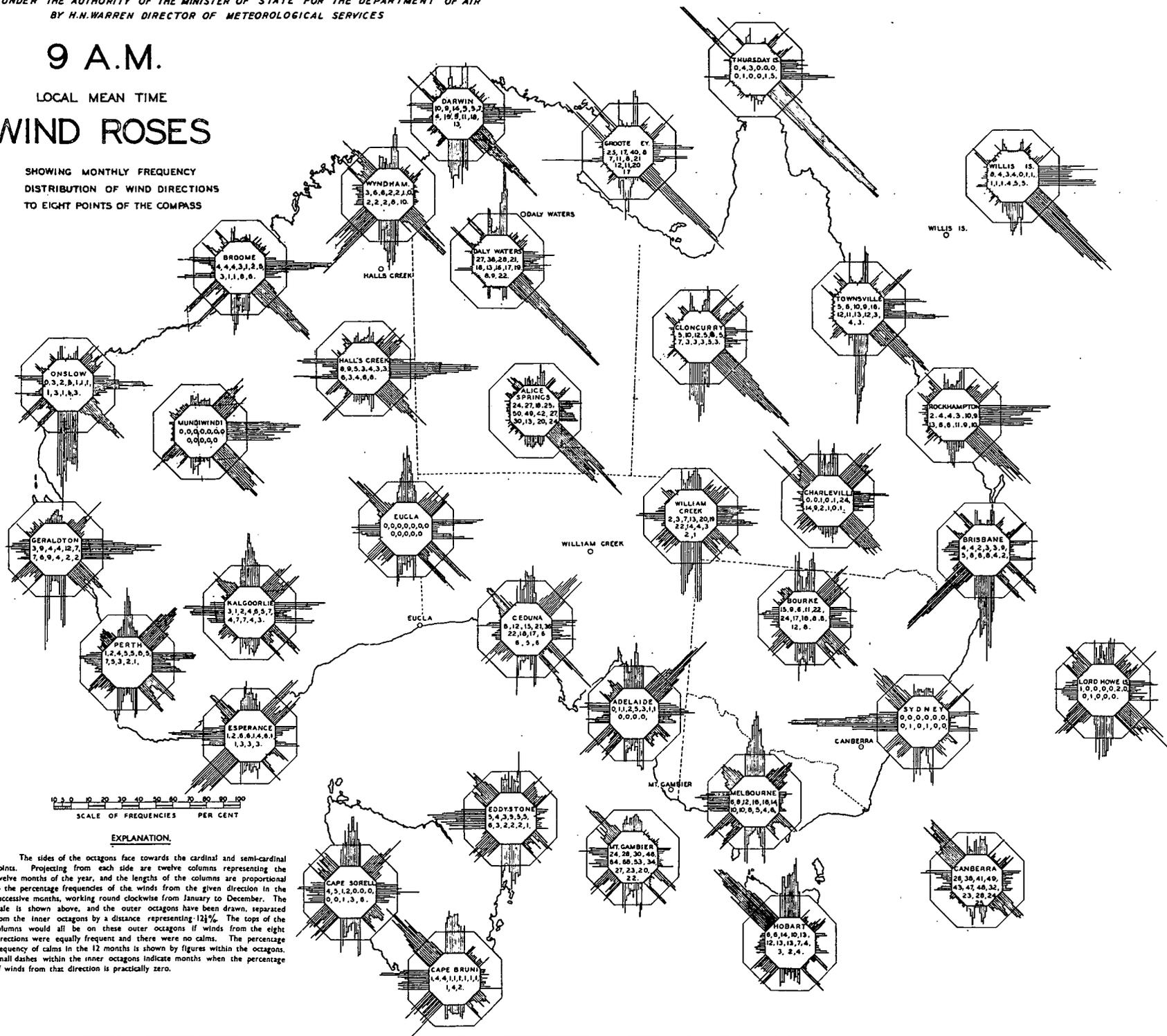
ISSUED UNDER THE AUTHORITY OF THE MINISTER OF STATE FOR THE DEPARTMENT OF AIR  
BY H.N. WARREN DIRECTOR OF METEOROLOGICAL SERVICES

# 9 A.M.

LOCAL MEAN TIME

## WIND ROSES

SHOWING MONTHLY FREQUENCY  
DISTRIBUTION OF WIND DIRECTIONS  
TO EIGHT POINTS OF THE COMPASS



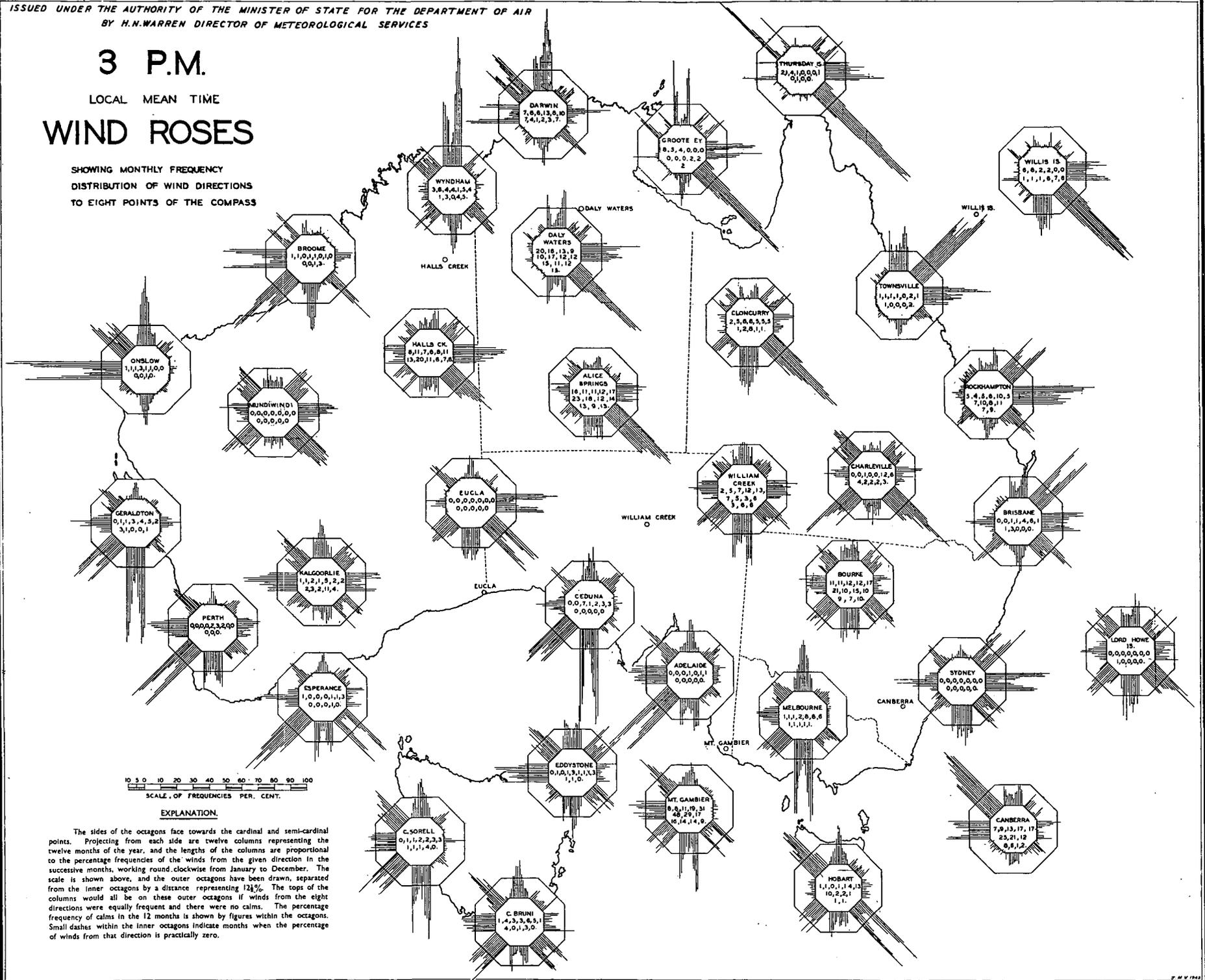
ISSUED UNDER THE AUTHORITY OF THE MINISTER OF STATE FOR THE DEPARTMENT OF AIR  
BY H.N. WARREN DIRECTOR OF METEOROLOGICAL SERVICES

# 3 P.M.

LOCAL MEAN TIME

## WIND ROSES

SHOWING MONTHLY FREQUENCY  
DISTRIBUTION OF WIND DIRECTIONS  
TO EIGHT POINTS OF THE COMPASS



Further reference to humidity will be found in the section on effective temperature (see p. 29).

4. **Evaporation.**—(i) *General.* The rate and quantity of evaporation in any territory is influenced by the prevailing temperature, and by atmospheric humidity, pressure and wind movement. In Australia, the question is, perhaps, of more than ordinary importance, since in its drier regions water has often to be conserved in tanks and dams. The magnitude of the economic loss by evaporation will be appreciated from the map reproduced herein (see p. 40) which shows that the yearly amount varies from about 20 inches over western Tasmania to more than 100 inches over the central and north-western parts of Australia. Over an area of 70 per cent. of the continent, comprising most inland districts and extending to the coast in the North-West and Eucla divisions of Western Australia, the rainfall does not exceed the evaporation during any month of the year. The central and north-western portions of the continent, comprising 46 per cent. of the total land mass, experience evaporation more than twice as great as their rainfall; it is noteworthy that the vegetation over most of this region is characterized by acacia, semi-desert, shrub steppe and porcupine grass. Since the loss by evaporation depends largely on the exposed area, tanks and dams so designed that the surface shall be a minimum are advantageous. Further, the more they are protected from the direct rays of the sun and from winds by means of suitable tree planting, the less will be the loss by evaporation. The Mansfield Process for treatment of tanks, dams and ponds by hexadecanol film, materially reducing effective evaporation, is a recent development which is already having beneficial results. These matters are naturally of more than ordinary concern in the drier districts of Australia.

(ii) *Comments on Map of Average Annual Evaporation.* The map of average annual evaporation in Australia (see p. 40) has been compiled on the basis of records obtained from a number of evaporimeters supplemented by estimates derived from records of saturation deficit by applying the Waite Institute factor of 263.\* Some modification of the latter values was found to be necessary in comparison with recordings of evaporimeters.

The standard evaporation tank used in Australia is cylindrical in form and is 36 inches in diameter and 36 inches deep. It is surrounded by a 6-inch water jacket and the whole is sunk into the ground so that the water surface is approximately at ground level.

Saturation deficit is obtained from readings of dry and wet bulb thermometers exposed in a standard Stevenson thermometer shelter. Saturation deficit is the difference between the vapour pressure indicated by the dry and wet bulb readings, and the saturation vapour pressure corresponding to the dry bulb temperature.

The Waite formula,  $e = 263 \text{ s.d.}$ , is not an exact relationship, but it takes account of one of the major factors in evaporation, i.e., the difference between saturation vapour pressures at the mean dew point and at the mean air temperature. Errors in the formula are found to be fairly consistent in considerable areas of Australia and corrections have been applied accordingly. No evaporation records are available north of latitude  $20^\circ$ , and corrections have been extrapolated for these areas. The evaporation stations on which estimates for the tropics have been based are Alice Springs (Northern Territory) and Winton (Queensland), and to a lesser degree Blackall (Queensland) and Marble Bar (Western Australia).

The map thus presents an estimate of evaporation for which allowance should be made for a certain margin of error (perhaps 10 per cent. or so) on the conservative side. In the absence of definite information, such a map should serve a useful purpose as a basis for many climatic studies.

For graphs and tables of mean monthly evaporation and rainfall at certain selected stations, see Official Year Book No. 37, pages 34–35.

5. **Rainfall.**—(i) *General.* The rainfall of any region is determined mainly by the direction and route of the prevailing winds, by the varying temperatures of the earth's surface over which they blow, and by its physiographical features.

Australia lies within the zones of the south-east trades and "prevailing" westerly winds. The southern limit of the south-east trades strikes the eastern shores at about  $30^\circ$  south latitude, and, with very few exceptions, the heaviest rains of the Australian continent are precipitated along the Pacific slopes to the north of that latitude, the varying quantities being more or less regulated by the differences in elevation of the shores and of the chain of mountains from the New South Wales northern border to Thursday Island,

\* Prescott, J. A. "Atmospheric Saturation Deficit in Australia" (Trans. Royal Society, S.A., Vol. LV., 1931).

upon which the rain-laden winds blow. The converse effect is exemplified on the north-west coast of Western Australia, where the prevailing winds, blowing from the interior of the continent instead of from the ocean, result in the lightest coastal rain in Australia.

The westerly winds, which skirt the southern shores, are responsible for the reliable, generally light to moderate rains enjoyed by the south-western portion of Western Australia, the agricultural areas of South Australia, a great part of Victoria, and the whole of Tasmania.

(ii) *Distribution of Rainfall.* The average annual rainfall map of Australia (see p. 41) shows that the heaviest yearly falls occur on the north coast of Queensland (up to more than 160 inches) and in western Tasmania (up to 140 inches), while from 50 to over 60 inches are received on parts of the eastern seaboard from Jervis Bay to the northern part of Cape York Peninsula, also around Darwin, on the West Kimberley coast, near Cape Leeuwin, about the Australian Alps in eastern Victoria and New South Wales, and on the north-eastern highlands in Tasmania. A great part of the interior of the continent, stretching from the far west of New South Wales and the south-west of Queensland to the vicinity of Shark Bay in Western Australia, has a very low average rainfall of less than 10 inches a year. Between these two regions of heavy and very low rainfall are the extensive areas which experience useful to good rains, and in the southern and eastern parts of which are found the best country and most of the population and primary production.

(iii) *Factors Determining Occurrence, Intensity and Seasonal Distribution of Rainfall.* Reference has already been made to the frequent rains occurring in the north-eastern coastal districts of Queensland with the prevailing south-east trade winds and to similar rains in the west of Tasmania with the prevailing westerly winds. Other rains in Australia are associated mainly with tropical and southern depressions.

The former chiefly affect the northern, eastern, and to some extent the central parts of the continent and operate in an irregular manner during the warmer half of the year, but principally from December to March. They vary considerably in activity and scope from year to year, occasionally developing into severe storms off the east and north-west coasts. Tropical rainstorms sometimes cover an extensive area, half of the continent on occasions receiving moderate to very heavy falls during a period of a few days. Rain is also experienced, with some regularity, with thunderstorms in tropical areas, especially near the coast. All these tropical rains, however, favour mostly the northern and eastern parts of the area referred to; the other parts further inland receive lighter, less frequent and less reliable rainfall. With the exception of districts near the east coast, where some rain falls in all seasons, the tropical parts of the continent receive useful rains only on rare occasions from May to September.

The southern depressions are most active in the winter—June to August—and early spring months. The rains associated with them are fairly reliable and frequent over southern Australia and Tasmania, and provide during that period the principal factor in the successful growing of wheat. These depressions also operate with varying activity during the remainder of the year, but the accompanying rains are usually lighter. The southern rains favour chiefly the south-west of Western Australia, the agricultural districts of South Australia, Victoria, Tasmania, and the southern parts of New South Wales. They sometimes extend into the drier regions of the interior, but only infrequently and irregularly.

The map showing mean monthly distribution of rainfall over Australia (see p. 42) gives, in graphic form, information on the amount and occurrence of rain.

(iv) *Wettest and Driest Regions.* The wettest known part of Australia is on the north-east coast of Queensland, between Port Douglas and Cardwell, where Deeral on the northern coast-line has an average annual rainfall of 172.26 inches and Tully on the Tully River 179.26 inches. In addition, three stations situated on, or adjacent to, the Johnstone and Russell Rivers have an average annual rainfall of between 144 and 169 inches. The maximum and minimum annual amounts there, in inches, are:—Deeral, 287.18 in 1945 and 94.65 in 1951, a range of 192.53 inches; Tully, 310.92 in 1950 and 104.98 in 1943, a range of 205.94 inches; Goondi, 241.53 in 1894 and 67.88 in 1915, a range of 173.65 inches; Innisfail, 232.06 in 1950 and 69.87 in 1902, a range of 162.19 inches; Harvey Creek, 254.77 in 1921 and 80.47 in 1902, a range of 174.30 inches.

On five occasions, more than 200 inches have been recorded at Goondi, the last of these being in 1950, when 204.97 inches were registered. The records at this station cover a period of 70 years.

In 30 years of record, Tully has exceeded 200 inches on eleven occasions, and in 28 complete years of record Harvey Creek has exceeded this figure four times.

In Tasmania, the wettest part is in the West Coast region, the average annual rainfall at Lake Margaret being 146.51 inches, with a maximum of 177.30 inches in 1948.

The driest known part of the continent is in an area of approximately 180,000 square miles surrounding Lake Eyre in South Australia, where the annual average is between 4 and 6 inches and where the fall rarely exceeds 10 inches in twelve months.

Records at stations have at times been interrupted, but of the 23 stations in this region which have an annual average of less than 5 inches, six have complete records extending from 30 to 55 years. Of these, Mulka has the lowest average of 4.05 inches (34 years), followed by Troudaninna with an average of 4.15 inches over 42 years. Troudaninna in the period 1893 to 1936 had only one year in which the total exceeded 9 inches (11.07 inches in 1894). There have been protracted periods when the average has been even less than 3 inches. From 1895 to 1903, Troudaninna received the following annual totals:— 2.78, 0.99, 5.71, 3.04, 3.18, 2.83, 1.80, 1.11, 4.87, an average of 2.91 inches. From 1918 to 1929 the average was only 2.65 inches, and in this period from December, 1924, to November, 1929, the average was only 1.70 inches.

Mulka since 1918 has only twice exceeded 10 inches for the annual total (11.72 inches in 1920 and 13.56 in 1955) and on 16 occasions in 34 years the annual total has been less than 3 inches. In one particular period from October, 1926 to September, 1930, the average was only 1.26 inches (505 points in 48 months). However, at Kanowana, an even lower four-year average of 1.12 inches was recorded between 1896 and 1899 with yearly totals of 43, 225, 87 and 94 points. An even smaller yearly total was recorded at Mungerania in 1889 when only 39 points were recorded on five days.

The average number of days of rain per month in this region is only 1 to 2 and the annual number ranges between 10 and 20. Oodnadatta (standard 30 years' average rainfall equal to 4.44 inches) has an average of 20 days of rain per year, while Cordillo Downs in the extreme north-east corner of the State of South Australia receives 5.16 inches on twelve days per year, averaging about one day of rain each month in the 30 year period 1911-1940.

No part of the earth, so far as is known, is absolutely rainless, and although at Arica, in northern Chile, the rainfall over a period of 15 years was nil, a further two years in which there were three measurable showers made the "average" for 17 years 0.02 inches.

(v) *Quantities and Distribution of Rainfall.* The general distribution is best seen from the rainfall map (see page 41) which shows the areas subject to average annual rainfalls lying between certain limits. The proportions of the total area of each State and of Australia as a whole enjoying varying quantities of rainfall determined from the latest available information are shown in the following table:—

As per 1957. **AVERAGE ANNUAL RAINFALL DISTRIBUTION.**  
(Per Cent.)

Average Annual Rainfall.	W. Aust.	N. Terr.	S. Aust.	Q'land.	N.S.W. (a)	Vic.	Tas. (b)	Total.
Under 10 inches ..	58.0	24.7	82.8	13.0	19.7	Nil	Nil	37.6
10 and under 15 ins.	22.4	32.4	9.4	14.4	23.5	22.4	Nil	19.9
15 and under 20 ..	6.8	9.7	4.5	19.7	17.5	15.2	0.7	10.9
20 and under 25 ..	3.7	6.6	2.2	18.8	14.2	17.9	11.0	9.1
25 and under 30 ..	3.7	9.3	0.8	11.6	9.1	18.0	11.4	7.3
30 and under 40 ..	3.3	4.7	0.3	11.1	9.9	16.1	20.4	6.6
40 inches and over ..	2.1	12.6	Nil	11.4	6.1	10.4	56.5	8.6
<b>Total</b> ..	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes Australian Capital Territory.  
are available.

(b) Over an area of 2,777 square miles no records

Referring first to the capital cities, the records of which are given in the next table, it will be seen that Sydney, with an average rainfall of 44.80 inches, occupies the chief place; Brisbane, Perth, Melbourne, Hobart and Canberra follow in that order, Adelaide with 21.09 inches being the driest. The extreme range from the wettest to the driest year is greatest at Brisbane (72.09 inches) and least at Adelaide (19.46 inches).

In order to show how the rainfall is distributed throughout the year in various parts of the continent, average figures for the various climatological districts have been selected (see map on page 42). The figures for Northern Rivers (District 14), show that nearly

the whole of the rainfall occurs there in the summer months, while little or none falls in the middle of the year. The figures for the Central Coast, south-west of Western Australia (District 9), are the reverse, for while the summer months are dry, the winter months are very wet. In the districts containing Melbourne and Hobart, the rain is fairly well distributed throughout the twelve months, with a maximum in October for both districts. In Queensland, the heaviest rains fall in the summer months, but good averages are also maintained during the other seasons in eastern parts.

On the coast of New South Wales, the first half of the year is the wettest, with heaviest falls in the autumn; the averages during the last six months are fair, and moderately uniform. Generally, it may be said that approximately one-third of the area of the continent, principally in the eastern and northern parts, enjoys an annual average rainfall of from 20 to 50 inches or more, the remaining two-thirds averaging from 5 to 20 inches.

(vi) *Tables of Rainfall.* The following table of rainfall for a fairly long period of years for each of the Australian capitals affords information as to the variability of the fall in successive years, and the list which follows in the next paragraph of the more remarkable falls furnishes information as to what may be expected on particular occasions.

RAINFALL: AUSTRALIAN CAPITAL CITIES.

Year.	PERTH.		ADELAIDE.		BRISBANE.		SYDNEY.		CANNBERRA.(a)		MELBOURNE.		HOBART.(b)	
	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.
1927 ..	36.59	133	16.92	101	62.08	130	48.56	138	18.59	90	17.98	135	20.13	185
1928 ..	44.88	140	19.43	107	52.64	145	40.07	130	23.12	70	24.09	151	30.23	205
1929 ..	36.77	132	17.51	119	39.78	118	57.90	129	28.81	90	28.01	168	26.55	194
1930 ..	39.80	129	18.65	116	41.22	144	44.47	141	17.33	82	25.41	145	19.38	152
1931 ..	39.18	118	22.26	145	66.72	136	49.22	153	24.02	103	28.63	164	27.17	179
1932 ..	39.40	121	25.04	141	24.79	97	37.47	146	20.18	118	31.08	179	30.29	155
1933 ..	32.47	116	22.12	130	49.71	118	42.71	153	20.78	96	22.28	136	23.18	182
1934 ..	40.61	120	20.24	125	54.26	117	64.91	183	35.58	131	33.53	157	23.17	194
1935 ..	32.28	129	23.45	140	34.64	111	30.97	131	23.78	95	29.98	183	32.22	196
1936 ..	30.64	118	19.34	121	21.77	101	30.22	130	26.24	108	24.30	187	19.60	178
1937 ..	35.28	120	23.01	128	34.79	113	52.00	157	20.46	82	21.45	144	20.65	160
1938 ..	29.64	111	19.26	119	43.49	110	39.17	132	19.26	79	17.63	131	31.32	169
1939 ..	45.70	123	23.29	139	41.43	122	33.67	127	27.63	116	33.11	166	27.23	188
1940 ..	20.00	98	16.16	116	42.37	93	39.34	125	17.38	64	19.83	126	17.17	135
1941 ..	34.74	122	22.56	126	31.50	105	26.74	129	19.55	91	31.78	157	23.49	145
1942 ..	39.24	140	25.44	133	44.01	125	48.29	121	25.76	104	29.79	148	19.42	163
1943 ..	31.46	117	17.84	135	50.68	126	50.74	136	24.59	123	18.80	150	20.84	149
1944 ..	27.39	123	17.13	114	27.85	100	31.04	115	12.05	75	21.32	143	26.23	151
1945 ..	52.67	137	17.85	105	48.16	130	46.47	136	22.35	100	19.22	152	16.92	157
1946 ..	41.47	122	22.59	135	38.66	83	36.05	111	22.31	94	29.80	177	39.45	193
1947 ..	43.42	137	21.89	146	60.30	146	41.45	137	27.95	135	30.47	163	38.61	181
1948 ..	34.75	126	21.40	122	41.54	106	38.83	131	32.11	101	20.98	155	23.42	178
1949 ..	27.15	126	18.23	119	47.18	121	66.26	149	27.71	100	31.41	163	22.85	157
1950 ..	32.27	122	16.06	91	63.93	152	86.33	183	43.35	132	26.18	147	19.25	131
1951 ..	34.14	127	25.44	135	33.89	87	53.15	143	22.00	103	29.85	155	24.57	163
1952 ..	39.28	123	19.99	128	33.49	122	59.19	130	37.87	141	34.39	177	30.35	165
1953 ..	37.14	119	20.00	121	43.60	101	40.86	110	19.40	102	28.38	148	28.06	162
1954 ..	28.05	112	16.73	109	61.36	142	41.29	134	18.81	82	33.53	139	27.20	143
1955 ..	46.52	138	24.58	134	50.41	136	72.46	160	30.85	124	30.70	160	22.32	168
1956 ..	37.35	107	27.24	154	59.18	120	67.33	155	40.46	150	30.96	188	36.63	175
1957 ..	33.40	117	16.71	110	20.58	80	27.13	110	14.41	81	20.68	146	28.66	129
Average	35.05	121	21.04	121	44.82	124	47.20	150	24.53	103	25.90	143	24.91	167
No. of														
Stand-	82	82	119	119	106	98	99	99	30	30	102	102	75	75
ard 30														
years'														
Normal(c)	35.99	128	21.09	122	40.09	117	44.80	143			25.89	156	25.03	180

(a) Commonwealth Forestry Bureau; records in issues of the Official Year Book prior to No. 36 were for the station at Acton which closed down in 1939. (b) Records taken from present site commenced 1883. (c) 1911-1940.

6. Remarkable Falls of Rain.—The following are the most notable falls of rain which have occurred within a period of twenty-four hours ending at 9 a.m. in the various States and Territories. For other very heavy falls at various localities, reference may be made to Official Year Book No. 14, pages 60–64, No. 22, pages 46–48 and No. 29, pages 43, 44 and 51.

#### HEAVY RAINFALLS: WESTERN AUSTRALIA, UP TO 1957 INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Whim Creek ..	3 Apr., 1898	29.41	Pilbara ..	2 Apr., 1898	14.04
Fortesque ..	3 May, 1890	23.36	Roebuck Plains ..	5 Jan., 1917	14.01
Roebuck Plains ..	6 Jan., 1917	22.36	Broome ..	6 Jan., 1917	14.00
Widjip ..	1 Apr., 1934	19.54	Carlton Hill ..	7 Feb., 1942	12.75
Derby ..	7 Jan., 1917	16.47	Towrana ..	1 Mar., 1943	12.16
Boodarie ..	21 Mar., 1899	14.53	Marble Bar ..	2 Mar., 1941	12.00
Balla Balla ..	21 Mar., 1899	14.40	Jimba Jimba ..	1 Mar., 1943	11.54
Winderrie ..	17 Jan., 1923	14.23			

#### HEAVY RAINFALLS: NORTHERN TERRITORY, UP TO 1957, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Brocks Creek ..	24 Dec., 1915	14.33	Cape Don ..	13 Jan., 1935	13.58
Groote Eylandt ..	9 Apr., 1931	14.29	Bathurst Island		
Borroloola ..	14 Mar., 1899	14.00	Mission ..	7 Apr., 1925	11.85
Timber Creek ..	5 Feb., 1942	13.65	Darwin ..	7 Jan., 1897	11.67

#### HEAVY RAINFALLS: SOUTH AUSTRALIA, UP TO 1957, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Ardrrossan ..	18 Feb., 1946	8.10	Wilmington ..	1 Mar., 1921	7.12
Carpa ..	18 Feb., 1946	7.83	Port Victoria ..	18 Feb., 1946	7.08
Wynbring ..	28 Feb., 1921	7.70	Mannum ..	25 Jan., 1941	6.84
Edithburg ..	18 Feb., 1946	7.46	Wirrabarra ..	7 Mar., 1910	6.80
Hesso ..	18 Feb., 1946	7.36	Cape Willoughby	18 Feb., 1946	6.80
Maitland ..	18 Feb., 1946	7.21	Torrens Vale ..	25 Jan., 1941	6.77

#### HEAVY RAINFALLS: QUEENSLAND, UP TO 1957, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Crohamhurst ..	3 Feb., 1893	35.71	Flat Top Island ..	21 Jan., 1918	25.18
Port Douglas ..	1 Apr., 1911	31.53	Landsborough ..	3 Feb., 1893	25.15
Yarrabah ..	2 Apr., 1911	30.65	Harvey Creek ..	31 Jan., 1913	24.72
Mooloolah ..	3 Feb., 1893	29.11	Kuranda ..	1 Apr., 1911	24.30
Kuranda ..	2 Apr., 1911	28.80	Babinda (Cairns)	2 Mar., 1935	24.14
Harvey Creek ..	3 Jan., 1911	27.75	Goondi ..	30 Jan., 1913	24.10
Sarina ..	26 Feb., 1913	27.75	Banyan (Cardwell)	12 Feb., 1927	24.00
Plane Ck. (Mackay)	26 Feb., 1913	27.73	Carruchan ..	24 Jan., 1934	24.00
Deeral ..	2 Mar., 1935	27.60	Tully Mill ..	12 Feb., 1927	23.86
Yarrabah Mission	24 Jan., 1916	27.20	Macnade Mill ..	7 Jan., 1901	23.33
Springbrook ..	24 Jan., 1947	27.07	Woodlands (Yepoon)		
Springbrook ..	21 Feb., 1954	27.04		1 Feb., 1893	23.07
Buderim Mountain	12 Jan., 1898	26.20			

## HEAVY RAINFALLS: NEW SOUTH WALES, UP TO 1957, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Dorrigo ..	24 June, 1950	25.04	Viaduct Creek ..	15 Mar., 1936	20.00
Cordeaux River ..	14 Feb., 1898	22.58	Buladelah ..	16 Apr., 1927	19.80
Morpeth ..	9 Mar., 1893	21.52	Orara Upper ..	24 June, 1950	19.80
Broger's Creek ..	13 Jan., 1911	20.83	Madden's Creek ..	13 Jan., 1911	18.68
South Head (Sydney Harbour) ..	16 Oct., 1844	20.41	Condong ..	27 Mar., 1887	18.66
" "	29 Apr., 1841	20.12	Candelo ..	27 Feb., 1919	18.58
Mount Pleasant ..	5 May, 1925	20.10	Mt. Kembla ..	13 Jan., 1911	18.25
Broger's Creek ..	14 Feb., 1898	20.05	Bega ..	27 Feb., 1919	17.88
Towamba ..	5 Mar., 1893	20.00	Kembla Heights	13 Jan., 1911	17.46
			Foxground ..	11 Sept., 1950	17.04

## HEAVY RAINFALL: AUSTRALIAN CAPITAL TERRITORY, UP TO 1957, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Cotter Junction ..	27 May, 1925	7.13	Uriarra (Woodside)	27 May, 1925	6.57
Canberra (Acton)	27 May, 1925	6.84	Land's End ..	27 May, 1925	6.35

## HEAVY RAINFALLS: VICTORIA, UP TO 1957, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Balook ..	18 Feb., 1951	10.81	Blackwood (Greenhill) ..	26 Jan., 1941	8.98
Hazel Park ..	1 Dec., 1934	10.50	Tambo Crossing ..	13 July, 1925	8.89
Kalorama ..	1 Dec., 1934	10.05	Corinella ..	28 June, 1948	8.75
Cann River ..	16 Mar., 1938	9.94	Erica ..	1 Dec., 1934	8.66
Tonghi Creek ..	27 Feb., 1919	9.90	Mt. Buffalo ..	6 June, 1917	8.53
Cann River ..	27 Feb., 1919	9.56	Korumburra ..	1 Dec., 1934	8.51
Olinda ..	1 Dec., 1934	9.10			

## HEAVY RAINFALLS: TASMANIA, UP TO 1957, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Mathinna ..	5 Apr., 1929	13.25	Riana ..	5 Apr., 1929	11.08
Cullenswood ..	5 Apr., 1929	11.12	Triabunna ..	5 June, 1923	10.20

7. **Snowfall.**—Light snow has been known to fall occasionally as far north as latitude 31° S., and from the western to the eastern shores of the continent. During exceptional seasons, it has fallen simultaneously over two-thirds of New South Wales, and has extended at times along the whole of the Great Dividing Range, from its southern extremity in Victoria as far north as Toowoomba in Queensland. During the winter, for several months, snow covers the ground to a great extent on the Australian Alps, where the temperature falls below zero Fahrenheit during the night. In the ravines around Mt. Kosciusko and similar localities the snow never entirely disappears after a severe winter.

8. **Hail.**—Hail falls most frequently along the southern shores of the continent in the winter, and over eastern Australia during the summer months. The size of the hailstones generally increases with distance from the coast. A summer rarely passes

without some station experiencing a fall of stones exceeding in size an ordinary hen egg and many riddled sheets of light-gauge galvanized iron bear evidence of the weight and penetrating power of the stones.

The hailstones occur most frequently when the barometric readings indicate a flat and unstable condition of pressure. Tornadoes or tornadic tendencies are almost invariably accompanied by hail, and on the east coast the clouds from which the stones fall are frequently of a remarkable sepia-coloured tint.

9. *Droughts.*—(a) *General.* The following extracts are taken from a Bureau of Meteorology publication *Droughts in Australia* by J. C. Foley (Bulletin 43, 1957). Sections of this publication on the definition of drought, drought severity according to climate, and general descriptions of major widespread Australian droughts are given fully but the method of treatment of data and assessment of the severity of droughts is given in outline only. Droughts which were confined to comparatively small areas of Australia are not mentioned below but are treated in detail in Bulletin 43.

(b) *The Definition of Drought.* A commonly accepted broad definition is "dryness due to lack of rain". Various writers have used this definition but for purposes of comparison a more precise definition is required. For instance, one writer represents drought frequencies by the number of consecutive days without rain experienced in various periods of years. Others prefer a definition in terms of deviation from the normal rainfall e.g. a defect of 50% from the mean rainfall of three or more consecutive months. Again, more recent writers have preferred to consider drought in terms of the effect of rainfall deficiencies on the plant life of an area, especially upon plants of economic importance. The views of Russell and Blair are accepted as a basis for this study. Russell, a pioneer meteorologist (Government Astronomer) in New South Wales, based his definition on his experiences of the droughts of 1888 and 1895. He says "The word drought is not used here" (in Australia) "as in the sense in which it is often used in England and elsewhere, that is, signifying a period of a few days or weeks in which not a drop of rain falls, but it is used to signify a period of months or years during which little rain falls and the country gets burnt up, grass and water disappear, crops become worthless and sheep and cattle die". Blair regards drought as a relative term. As crops in different parts of the world are more or less adjusted to the normal moisture conditions and to the normal rainfall distribution for the region and a rainless period that would constitute a drought in one region may not be unusual or injurious in another. To these views it may be added that crops and other vegetation tolerate variations in moisture conditions within certain limits and a drought occurs when the lower limit of moisture which can be tolerated is exceeded.

It is therefore considered sufficient and justifiable to consider a drought to have occurred when there has been a persistent deficiency of rainfall over a period of months without specifying precisely the degree of deficiency or its duration. Of course, the effects of rainfall deficiency depend on other factors such as the moisture status of the ground and the state of water supplies when a period of deficiency sets in, the season of the year, temperature, evaporation and wind conditions and the resistance to drought of various types of crops and other vegetation. However it is not practicable or necessary to take these factors into account in a study which aims to discuss periods of serious rainfall deficiency in the meteorological history of Australia and their effects on primary production as shown by the reports available.

(c) *The Treatment of Data and Assessment of Degree of Severity.* The problem was approached primarily from the viewpoint of deficiency of rainfall compared with the average for all years of record. Periods of rainfall deficiency were identified by means of a "residual mass" or "cumulated residual" graph, which is a continuous plot of cumulative totals of departure from the average, plus and minus, of monthly rainfall through all years of record. Residual mass graphs show clearly the beginning and end of periods of rainfall deficiency and excess and the amount of deficiency in drought periods. For construction of the residual mass graphs, 28 areas of agricultural or pastoral importance were selected, with a group of five or ten stations with a long series of records to represent the rainfall regime in each. Long periods were found, amounting to many years, in which some months or years had over average or average rainfall but the majority had under average rainfall. However, periods of uninterrupted rainfall deficiency were regarded as more important for this study of droughts.

An index of severity was derived from amounts of rainfall deficiency in droughts of varying duration. The amount of deficiency was expressed in terms of thousandths of the

annual average rainfall for the group of stations concerned. Also, for each dry period determined from the residual mass graph, or for each period of highest intensity in a drought of long duration, a plot was made on a spot diagram of duration against amount of deficiency per month. From the spot diagram, the degree of severity (high, moderate or low) of any particular drought relative to experience in the area concerned, as shown by all plots on the diagram, could be determined and the index of severity interpreted accordingly.

In discussing effects on primary production during dry periods, frequent reference is made below to average wheat yield. Although this has tended to increase during the period under review because of improved strains, more efficient methods of cultivation, etc., the average yield is still regarded as a fairly good indicator of the severity of drought. The wheat belt is so situated that the average yield also reflects to a considerable degree the effects of drought over considerable areas of neighbouring pastoral country.

(d) *Drought Severity According to Climate.* Reference was made in the statement by Russell to the distinction between definitions of drought based on experiences in New South Wales and in the British Isles. An example of the different economic effects of droughts in a cool moist climate as compared with a dry hot climate may be seen in statistics of wheat yields. In Tasmania, since 1915, the average yield has been about 20 bushels per acre (acreage under wheat approximately 20,000 up to 1938). The lowest yields were 11.6 and 12.5 bushels per acre in wet years (1917-18 and 1916-17) and 13.4 in a dry year (1946). For Australia as a whole (acreage approximately 12 million), the average yield has been about 12 bushels per acre and the lowest 2.4 and 2.6 in years of severe drought (1902-03 and 1914-15 respectively). In terms of stock losses, the decrease in flocks and herds due to dry spells in a cool moist region with a reliable rainfall can scarcely be distinguished in statistical tables from fluctuations due to other causes. In this type of climate, droughts may involve losses of income for farmers and pastoralists as a result of poor crops, shortage of feed and water for stock and losses of stock, but it appears from production statistics that equally severe losses may occur as a result of excessively wet seasons. In the pastoral areas of inland Australia, on the other hand, cattle losses due mainly to drought may be counted by hundreds of thousands and sheep losses by millions. In Queensland, in 1947, it was reported that companies engaged in the dairying industry (in a warm moist climate with a rather high variability of rainfall) lost £2½ million due to drought in that year. In 1951, sugar losses amounted to £5 million, wheat £3 million and butter and cheese losses £1 million. Drought losses by graziers were estimated to be at least £10 million.

(e) *Major Widespread Droughts in Australia.* A brief discussion is given below of the seven major severe and widespread droughts since rainfall records commenced (those of 1864-66, 1880-86, 1888, 1895-1903, 1911-16, 1918-20 and 1939-45) and of some less severe but nevertheless widespread droughts.

1864-66 (or 68). The little data available indicate that this drought was rather severe in Victoria, South Australia, New South Wales, Queensland and Western Australia.

1880-86. Areas most affected were in Victoria (North and Gippsland), New South Wales (mainly Northern Wheat Belt, Northern Tablelands and South Coast), Queensland (1881-86 in South East with breaks, otherwise mainly in coastal areas, the Central Highlands and Central Interior in 1883-86) and South Australia (1884-86 mainly in agricultural areas).

Rainfall deficiencies in the wheat growing areas were not particularly high except in 1881 in Victoria and in the critical growth period in Western Australia and in 1885-86 in South Australia. Average wheat yields for Australia were 7.65 bushels per acre in 1880-81, 7.16 in 1881-82, 7.06 in 1882-83 and 6.03 in 1885-86. A considerable fall in sheep numbers occurred in 1884 amounting to 8 million for Australia as a whole (6 million in New South Wales and 2 million in Queensland).

1888. This occurred particularly in Victoria (North and Gippsland), Tasmania (1887-89 in South), New South Wales, Queensland (1888-89), and South Australia (central agricultural areas).

In 1888, wheat growing areas suffered a considerable rainfall deficiency in the growing season. Average yields were 3.85 bushels per acre in South Australia and 7.1 in Victoria (the principal wheat areas), 4.76 in New South Wales and 5.45 for Australia as a whole. Rainfall deficiencies were also high in much of Queensland in 1888 (including the following summer),

on the Coast of New South Wales, in Gippsland, Victoria, and in pastoral areas of South Australia. This drought however was of short duration and did not seriously affect stock numbers beyond retarding the rapid increase of that period.

1895–1903. It is difficult for most present day Australians to realise the magnitude of the effects of this drought on the economy of the country. Sheep numbers which had reached 100 million were reduced by half and cattle numbers by over 40 per cent. Average wheat yields exceeded 8 bushels per acre in only one year of the nine.

Rainfall deficiencies were very serious in South Australia, northern Victoria, New South Wales, central Australia and Tasmania where conditions were almost continuously dry from 1896 till the end of 1902. In the Western Australian agricultural areas, drought commenced in 1894 but good seasons were experienced in 1899 and 1900. In Queensland, almost continuously dry conditions prevailed from 1896, deficiencies in the wet season being very marked during 1900–1903. On the North Coast and Northern Tablelands of New South Wales, drought was intermittent until 1900 when continuous dry conditions set in until early in 1903. Areas least affected were the South Coast of New South Wales, western Victoria and the Northern Rivers district of the Northern Territory but even in these areas serious deficiencies occurred for various periods.

The lowest average wheat yield was in 1902, 2.4 bushels per acre for the Commonwealth (1.24 in New South Wales, 1.29 in Victoria and 3.64 in South Australia). In 1896, the average for Australia was 4.88 (1.66 in South Australia, 4.49 in Victoria), and in 1895, 5.19 (4.01 in Victoria, 4.2 in South Australia and 8.71 in New South Wales).

Sheep numbers had reached 106.4 million in 1892. In 1893, there was a decrease of 3.8 million, in 1895, 9.7 million, in 1897, 8 million (New South Wales 4.4 million, Queensland 1.8 million and South Australia 1.3 million), in 1898, 3.4 million (New South Wales 2.7 million), in 1899, 6.9 million (New South Wales 5 million) and in 1902, 18.4 million (New South Wales 15.2 million, Queensland 2.8 million).

Cattle numbers had reached 12.3 million by 1895. By 1898, the number had fallen to 10.8 million, by 1900 to 9.6 million and by January 1903 to 7 million.

1911–16. Rainfall deficiencies were high in the growing season of 1914 in the wheat growing areas of Victoria, New South Wales, South Australia and Western Australia, the worst drought year since 1902. The average wheat yield for the Commonwealth was only 2.58 bushels per acre (Victoria 1.38, South Australia, 1.41, New South Wales 4.65 and Western Australia 1.91).

Dry conditions in inland New South Wales extended from 1911 to 1915 or 1916 and in Western Australia from 1910 or 1911 to 1914. In Queensland and parts of the Northern Territory (Tennant Creek—Alexandria Downs), large rainfall deficiencies were experienced from 1911 to 1916, in the latter area practically continuously. In Queensland, the wet seasons failed seriously in 1912 and 1915 and on the Coast in 1916. The Northern Tablelands of New South Wales experienced similar conditions, and also the North Coast except in 1912. In Victoria and Tasmania, the drought conditions were mainly confined to the period spring 1913 to autumn 1915.

Statistics of sheep numbers showed a decline of 9.75 million in 1912 (5.9 million in New South Wales, 2 million in Victoria) and 9.35 million in 1915 (7.2 million in Queensland, 1.5 million in Victoria).

Cattle numbers decreased by nearly 2 million from 1912 to 1915 inclusive, including 1.1 million in 1915 (675,000 in Queensland, 320,000 in Victoria).

1918–20. Serious rainfall deficiencies occurred in this period in Queensland, New South Wales (except the South Coast), northern and western Victoria, South Australia, Northern Territory and Tasmania (1919–24 in the south). In 1920, there was no "wet" season in Queensland particularly on the coast. The only areas completely free from drought were the agricultural areas of Western Australia.

Average wheat yields for Australia in 1918 were 9.47 bushels per acre (New South Wales 7.6) and in 1919, 7.16 bushels per acre (New South Wales 2.98, Victoria 7.75, South Australia 7.77).

The decline in sheep numbers in 1919 was 12.4 million (9.1 million in New South Wales, 1.3 million in Victoria). Cattle numbers showed little change.

1922–23 and 1926–29. Wet season rains were deficient in Queensland in 1923 and 1926 and in coastal areas of that State in 1924. The adjacent North Coast and Tablelands of New South Wales likewise experienced dry conditions. Other areas affected by the first dry period which commenced in 1922 or earlier were inland areas of New South Wales, pastoral areas of South Australia, northern and western Victoria and part of the north-west of Western Australia.

The average wheat yield in New South Wales was 9.74 bushels per acre in 1922–23 and that for the Commonwealth 11.21 bushels.

On the Central Coast of Queensland, very dry conditions persisted until 1926. In inland areas of New South Wales and in Victoria, another dry period was experienced from 1925–26 until early 1930. This included the cereal growing seasons of 1927 and 1928. In the Western and Gippsland Districts of Victoria, however, the dry conditions ended in 1927. Somewhat similar conditions prevailed in Tasmania.

In the inland areas of Queensland, an even more severe drought period was experienced from 1925 to 1931 in the southern interior and until 1935 in the central interior. The year 1926 was very bad in Queensland. In the Northern Territory, a dry period commenced in 1925 or earlier and continued until 1929 with large rainfall deficiencies. Similar conditions prevailed in pastoral areas of South Australia from the end of 1926 until 1930. In parts of the north west of Western Australia, there were heavy rainfall deficiencies from 1922 to 1927.

The average wheat yield for the Commonwealth in 1927–28 was 9.63 bushels per acre (8.92 in New South Wales, 8.54 in Victoria and 8.16 in South Australia).

A fall of nearly 4 million in sheep numbers occurred in Queensland in 1926 but this was more than offset by increases in the other States. In 1927, however, there was a fall of 3.4 million in Commonwealth numbers (5.2 million in New South Wales partly offset by rises in other States). Cattle numbers fell by 1.4 million in 1926 (1 million in Queensland).

1933–38. During the thirties, there were frequent dry periods of some severity in some parts of the Commonwealth, the most notable up to 1935 being in Queensland in 1931 and 1932–33. In 1935, the wet season again failed in Queensland and to a lesser degree also in parts of the Northern Territory and the north-west of Western Australia. In the latter region, a long dry period commenced in 1934–1935 and persisted until 1941. In Western Australian agricultural areas, the period 1934–38 was persistently dry. Victoria and inland areas of New South Wales experienced dry conditions in 1937–38 and Tasmania at intervals in 1935–37 (1933 and the early part of 1934 having also been dry).

Tropical areas experiencing dry conditions in 1937–38 included Queensland and the Northern Territory. Rainfall deficiencies were considerable in southern inland areas of Queensland and also in western New South Wales. Rather dry conditions persisted throughout most of the period 1935–39 on the coast of New South Wales while on the Northern Tablelands there was a long period of under average rainfall from 1935 to 1940 inclusive.

Except in 1937 and 1938, most of the cereal growing areas were free from drought and yields generally were fairly satisfactory. In 1934, the average wheat yield for the Commonwealth was 10.63 bushels per acre (8.61 in South Australia) and in 1938, 10.83 bushels per acre (Victoria 6.59). Sheep numbers decreased by 3 million in 1933 (1.5 million in New South Wales, 1.3 million in Queensland), 4.2 million in 1935 (1.4 million in New

South Wales, 3.5 million in Queensland), and 2.3 million in 1938 (2.7 million in New South Wales offset by increases elsewhere). In Western Australia, there was a decrease of 2.3 million in 1936 and 1937 but Commonwealth numbers increased in these years. Cattle numbers decreased by about 1.2 million between 1935 and 1939 (670,000 in New South Wales and about 400,000 in Victoria).

1939-45. The main dry periods in these years were 1940 and 1943-45. In 1940, serious deficiencies occurred in the cereal growing season in Victoria, inland New South Wales, South Australia and Western Australia. The average wheat yield for the Commonwealth was reduced to 6.5 bushels per acre (5.06 in Victoria, 5.37 in New South Wales, 6.97 in South Australia and 8.02 in Western Australia). In 1944, serious deficiencies again occurred in these areas resulting in an average wheat yield of 6.25 bushels per acre for the Commonwealth (1.63 in Victoria, 5.7 in South Australia and 6.02 in New South Wales).

Persistent rainfall deficiencies occurred throughout most of the period 1939-1945 in pastoral areas of South Australia, western New South Wales, southern Queensland (1940-47) and on the coast of New South Wales. The serious drought conditions in the De Grey, Fortescue, Gascoyne and Murchison districts of Western Australia in the mid thirties continued until 1941. In Tasmania, the period as a whole was one of rainfall deficiency, 1945 being an exceptionally dry year in the south.

Sheep numbers in Australia had reached 125 million by 1942. In the next four years, there was a decline of 29 million. Approximately 18 million occurred in 1944 (New South Wales 10 million, Victoria 3 million, Queensland 2 million, South Australia 2 million and Western Australia 1 million), and 9 million in 1945 (2.6 million in New South Wales, 2.4 million in Queensland and 1.8 million in Victoria).

1946-49. The summers of 1947, 1948 and 1949 were marked by considerable rainfall deficiencies in Queensland and the Northern Territory and the cereal growing season of 1946 in inland areas of New South Wales. The wet seasons of 1948 and 1949 were also deficient in rainfall in parts of the north-west of Western Australia as were the cereal growing periods in the agricultural areas of that State. The wheat yield for 1946 was 8.9 bushels per acre for the Commonwealth (3.5 in New South Wales, 2.8 in Queensland and 9.81 in Western Australia), but in other years was very satisfactory.

1951-55. The wet season of 1951-52 was marked by serious rainfall deficiencies in Queensland, the Northern Territory and the north-west of Western Australia. In Queensland and the Northern Territory, the dry conditions set in in the late summer of 1951. In the Kimberley division of Western Australia, serious deficiencies persisted until about March 1954 and other parts of that State experienced prolonged periods of rainfall deficiency in these years. Growing seasons for cereals were on the whole free from serious drought and wheat yields were maintained at a high level. In the 1952-53 season, the average for the Commonwealth, 19.1 bushels per acre, was the highest on record, the total yield being 195 million bushels. The average yield for 1953-54, 18.4 bushels per acre, was also higher than any prior to 1952-53. The highest wheat yield on record was 220 million bushels in 1947-48 from 13.9 million acres. Acreages in 1952-53 and 1953-54 were respectively 10.6 and 11.2 million, there having been a decline since the early thirties (18 million in 1930-31).

Drought in tropical Australia in 1951-52 resulted in heavy cattle and sheep losses, though this is not very apparent from statistics for the States and Commonwealth as a whole. Sheep numbers in Queensland and New South Wales showed a decline of  $1\frac{1}{2}$  million in the year ended March 1952, but for the Commonwealth there was an increase of about  $1\frac{1}{2}$  million. Cattle numbers decreased by about 300,000.

It is of interest to note that the present succession of good agricultural seasons, at least in the wheat belt, has been the longest on record with average wheat yields of over 15 bushels per acre. This is presumably due in some measure to improvements in wheat strains and more efficient farming methods. A similar period with average yields above 10 bushels per acre for the Commonwealth was the decade 1930-39. In these years, in New South Wales, average yields were 12 to 17 bushels per acre. Victoria experienced a poor year in 1938 and South Australia had only moderate yields in 1930, 1933, 1934 and 1936 while in Western Australia the yields in the three years 1934-36 were below 10 bushels per acre.

(f) *Conclusions.* The conclusion to be drawn from this study is that, during the last 100 years, Australia has been subjected to at least seven major droughts affecting the greater part of the continent and several other droughts causing severe losses in restricted areas. The drought of 1895 to 1903 was undoubtedly the most disastrous in its effects on primary producers.

The method of tracing fluctuations of rainfall, month by month, in relation to the normal demonstrates that in all parts of the Commonwealth large and irregular variations in rainfall occur and there is no reason to doubt that great fluctuations, especially in inland areas, will be repeated in the future. It may also be argued that the worst conditions experienced in the last 100 years do not represent the worst conditions ever likely to be experienced. Although details of experiences of primary producers and other settlers during drought periods make a gloomy picture, they serve to indicate the nature of measures previously adopted to counteract the worst effects of drought and which are capable of further expansion in the future. These include conservation of fodder in good seasons and increased facilities for the storage of fodder and grain, the provision of adequate transport facilities for the economic removal of starving stock from, and the supply of fodder and water to, drought stricken areas and the expansion of irrigation to areas where this is practicable. The rapid expansion of primary industries in Australia in the last fifty years has greatly increased the vulnerability of the economic position of the country to drought. However, the fact that settlement has been maintained and has prospered in many areas subject to frequent and severe droughts indicates that the rich returns of good seasons, if carefully husbanded, are sufficient to tide over lean periods.

Residual mass graphs show that the incidence of droughts shows no regular rhythm in time of onset, duration or extent of territory affected, indicating that there is little or no prospect of successfully forecasting drought from an assumed occurrence of rainfall cycles. The little work done on the study of synoptic weather types in drought periods suggests that droughts are related to certain characteristics of the general circulation of the atmosphere including the absence of favourable atmospheric flow patterns and of an effective rain producing mechanism in such periods over areas affected by drought.

Results of upper air observations which have become available in recent years show that in wet years the frequent large scale development of upper cyclones ("cut off lows") and troughs is a striking feature while in dry periods they are almost entirely absent. The shift of this form of activity in the general circulation of the atmosphere from one region of the earth's surface to another is a subject for world wide study.

10. *Barometric Pressures.*—The mean annual barometric pressure (corrected to sea level and standard gravity) in Australia varies from 29.80 inches on the north coast to 29.92 inches over the central and 30.03 inches in the southern parts of the continent. In January, the mean pressure ranges from 29.70 inches in the northern and central areas to 29.95 inches in the southern. The July mean pressure ranges from 29.90 inches at Darwin to 30.12 inches at Alice Springs. Barometer readings corrected to mean sea level and standard gravity have, under anticyclonic conditions, ranged as high as 30.935 inches (at Hobart on 13th July, 1846) and have fallen as low as 27.55 inches. This record low was registered at Mackay during a tropical hurricane on 21st January, 1918. An almost equally abnormal reading of 27.88 inches was recorded at Innisfail during a similar storm on 10th March, 1918. For graphs of Mean Barometric Pressure at Capital Cities, see Official Year Book No. 37, page 35.

11. *Wind.*—(i) *Trade Winds.* The two distinctive wind currents in Australia are, as previously stated, the south-east trade and the "prevailing" westerly winds. As the belt of the earth's atmosphere in which they blow apparently follows the sun's ecliptic path north and south of the equator, so the area of the continent affected by these winds varies at different seasons of the year. During the summer months, the anticyclonic belt travels in high latitudes, thereby bringing the south-east trade winds as far south

as 30° south latitude. The "prevailing" westerly winds retreat a considerable distance to the south of Australia, and are less in evidence in the hot months. When the sun passes to the north of the equator, the south-east trade winds follow it, and only operate to the north of the tropics for the greater part of the winter. The westerly winds come into lower latitudes during the same period of the year. They sweep across the southern areas of the continent from Cape Leeuwin to Cape Howe, and during some seasons are remarkably persistent and strong, and occasionally penetrate to almost tropical latitudes.

(ii) *North-west Monsoon.* As the belt of south-east trade winds retreats southward during the summer, it is replaced in the north and north-west of Australia first by a sequence of light variable winds and then by the north-west monsoon. In Australia, the north-west monsoon has not the persistence nor regularity of the Indian south-west monsoon but is sufficiently characteristic for the summer in the north of Australia to be called the "North-west Season". In central and eastern Queensland, the north-west monsoon in the summer has comparatively little effect and the trade winds, albeit weakened, are still dominant winds. With the migration of the sun northward in the autumn, the north-west monsoon is replaced first by light variable winds and then by the trade winds.

Further particulars of Australian wind conditions and meteorology will be found in Official Year Book No. 38, pages 58-61. Reference should also be made to the wind rose diagrams on pages 43 and 44.

(iii) *Cyclones and Storms.* The "elements" in Australia are ordinarily peaceful, and while destructive cyclones have visited various parts, more especially coastal areas, such visitations are rare, and may be properly described as erratic.

During the winter months, the southern shores of the continent are subject to deep depressions of the southern low-pressure belt. They are felt most severely over the south-western parts of Western Australia, to the south-east of South Australia, in Bass Strait, along the coastline of Victoria, and on the west coast of Tasmania. Apparently the more violent wind pressures from these disturbances are experienced in their northern half, or in that part of them which has a north-westerly to a south-westerly circulation.

The north-east coast of Queensland is occasionally visited by hurricanes from the north-east tropics. During the first four months of the year, these hurricanes appear to have their origin in the neighbourhood of the South Pacific Islands, their path being a parabolic curve first to the south-west and finally towards the south-east.

Very severe cyclones, locally known as "willy willies," are peculiar to the north-west coast of Western Australia from the months of November to April, inclusive. They usually originate over the ocean to the north or north-west of Australia, and travel in a south-westerly direction with continually increasing force, displaying their greatest energy near Cossack and Onslow, between latitudes 20° and 22° South. The winds in these storms, like those from the north-east tropics, are very violent and destructive. The greatest velocities are usually to be found in the south-eastern quadrant of the cyclones, with north-east to east winds. After leaving the north-west coast, these storms either travel southwards, following the coast-line, or cross the continent to the Great Australian Bight. When they take the latter course, their track is marked by torrential rains, as much as 29.41 inches, for example, being recorded in 24 hours at Whim Creek from one such occurrence. Falls of 10 inches and over have frequently been recorded in the northern interior of Western Australia from similar storms.

Some further notes on severe cyclones and on "southerly bursters", a characteristic feature of the eastern part of Australia, appeared in early issues of the Official Year Book (see No. 6, pp. 84-86), and a special article dealing with "Australian Hurricanes and Related Storms" appeared in Official Year Book No. 16, pp. 80-84.

Depressions vary considerably in their isobaric forms, intensity and other characteristics. Some bring rain in variable quantities, some heat and others mainly wind. A common type in southern Australia is the "Λ" shaped trough with an abrupt "backing" of the wind or "line squall" as it passes. The cold front is most frequently found through the centre of the "trough" because it is along this line, and extending into the upper levels of the atmosphere, that the demarcation of different air masses is so well defined. The best rains in inland Australia occur when extensive masses of warm moist tropical air move into the interior and are forced to rise by convergence of flow or by impact with a cold air stream.

The speed of low pressure systems is very variable, but in general in southern latitudes the movement is of the order of 500 to 700 miles per day.

12. **Influences affecting Australian Climate.**—(i) *General.* Australian history does not cover a sufficient period, nor is the country sufficiently occupied, to ascertain whether or not the advance of settlement has materially affected the climate as a whole. Local changes have, however, taken place, a fact which suggests that settlement and the treatment of the land have a distinct effect on local conditions. For example, low-lying lands on the north coast of New South Wales, which originally were seldom subject to frosts, have, with the deforestation of the surrounding hills, experienced annual visitations, the probable explanation being that through the absence of trees the cold air of the highlands now flows unchecked and untempered down the sides of the hills to the valleys and lower lands.

(ii) *Influence of Forests on Climate.* As already indicated, forests doubtless exercise a great influence on local climate, and hence, to the extent that forestal undertakings will allow, the weather can be controlled by human agency. The direct action of forests is an equalizing one; thus, especially in equatorial regions, and during the warmest portion of the year, they considerably reduce the mean temperature of the air. They also reduce the diurnal extremes of shade temperatures by altering the extent of radiating surface by evaporation, and by checking the movement of air, and while decreasing evaporation from the ground, they increase the relative humidity. Vegetation greatly diminishes the rate of flow-off of rain and the washing away of surface soil, and when a region is protected by trees a steadier water supply is ensured, and the rainfall is better conserved. In regions of snowfall, the supply of water to rivers is similarly regulated, and without this and the sheltering influence of ravines and "gullies," watercourses supplied mainly by melting snow would be subject to alternate periods of flooding and dryness. This is borne out in the case of the inland rivers, the River Murray, for example, which has never been known to become dry, deriving its steadiness of flow mainly through the causes indicated.

(iii) *Direct Influence of Forests on Rainfall.* Whether forests have a direct influence on rainfall is a debatable question, some authorities alleging that precipitation is undoubtedly induced by forests, while others take the opposite view.

Sufficient evidence exists, however, to prove that, even if the rainfall is not increased, the beneficial climatic effect of forest lands more than warrants their protection and extension. Rapid rate of evaporation, induced by both hot and cold winds, injures crops and makes life uncomfortable on the plains, and, while it may be doubted that the forest aids in increasing precipitation, it must be admitted that it does check winds and the rapid evaporation due to them. Trees as wind-breaks have been successfully planted in central parts of the United States of America, and there is no reason why similar experiments should not be successful in many parts of the treeless interior of Australia. The belts should be planted at right angles to the direction of the prevailing parching winds, and if not more than half a mile apart will afford shelter to the enclosed areas.

13. **Rainfall and Temperatures, Various Cities.**—Official Year Book No. 34, page 28, shows rainfall and temperature and No. 38, page 42, temperature, for various important cities throughout the world and for the Australian capitals.

14. **Climatological Tables.**—The averages and extremes for a number of climatological elements, which have been determined from long series of observations at the Australian capitals up to and including the year 1957, are given on the following eight pages.

NOTE.—The following points apply throughout:—

- (i) Where records are available, mean or average values have been calculated on a standard period of 30 years from 1911 to 1940.
- (ii) Extreme values have been extracted from all available years of actual record, but the number of years quoted does not include intervening periods when observations were temporarily discontinued.

CLIMATOLOGICAL DATA: PERTH, WESTERN AUSTRALIA.  
(LAT. 31° 57' S., LONG. 115° 51' E. HEIGHT ABOVE M.S.L. 210 FT.)  
Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. M.n. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 71 feet.)					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m. to 3 p.m. (a)	No. of Clear Days.
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.					
					9 a.m.	3 p.m.				
No. of years of observations.	30(b)	30(b)	59	45	30(b)	30(b)	30(b)	30(b)	30(b)	
January ..	29.897	10.1	33.2 27/98	49	E	SSW	10.37	2	2.9	14
February ..	29.922	9.9	27.1 6/08	54	ENE	SSW	8.63	2	3.1	13
March ..	29.976	9.4	27.1 6/13	66	E	SSW	7.52	2	3.5	12
April ..	30.071	7.9	39.8 25/00	61	ENE	SSW	4.62	2	4.2	9
May ..	30.062	7.8	34.4 29/32	73	NE	WSW	2.80	3	5.4	6
June ..	30.068	7.8	38.1 17/27	80	N	NW	1.82	2	5.9	5
July ..	30.082	8.2	42.3 20/26	73	NNE	W	1.76	2	5.6	5
August ..	30.084	8.7	40.3 15/03	77	N	WNW	2.37	2	5.6	6
September ..	30.073	8.7	36.0 11/05	75	ENE	SSW	3.44	1	4.9	8
October ..	30.033	9.3	33.7 6/16	65	SE	SW	5.38	1	4.8	8
November ..	29.989	9.9	32.4 18/97	63	E	SW	7.65	2	3.9	9
December ..	29.923	10.2	32.3 6/22	64	E	SSW	9.69	2	3.2	13
Year { Totals ..	—	—	—	—	—	—	66.05	23	—	108
Year { Averages ..	30.015	9.0	—	—	E	SSW	—	—	4.4	—
Year { Extremes ..	—	—	42.3 20/7/26	80	—	—	—	—	—	—

(a) Scale 0-10.

(b) Standard 30 years' normal (1911-1940).

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).			Extreme Temperature (°Fahr.).			Mean Daily Hours of Sunshine.
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.	Extreme Range.	Highest in Sun.	Lowest on Grass.		
									No. of years over which observation extends.	
No. of years over which observation extends.	30(a)	30(a)	30(a)	61	61	61	53	59	30(a)	
January ..	84.6	63.3	73.9	110.7 29/56	48.6 20/25	62.1	177.3 22/14	39.5 20/25	10.4	
February ..	85.1	63.5	74.3	112.2 8/33	47.7 1/02	64.5	173.7 4/34	39.8 1/13	9.8	
March ..	81.3	61.5	71.4	106.4 14/22	45.8 8/03	60.6	175.9 23/47	36.7 8/03	8.8	
April ..	76.3	57.4	66.8	99.7 9/10	39.3 20/14	60.4	157.0 8/16	31.0 20/14	7.5	
May ..	69.0	52.8	60.9	90.4 2/07	34.3 11/14	56.1	146.0 4/25	25.3 11/14	5.7	
June ..	64.4	49.8	57.1	81.7 2/14	34.9 22/55	46.8	135.5 9/14	26.3 11/37	4.8	
July ..	62.8	48.0	55.4	76.4 21/21	34.2 7/16	42.2	133.2 13/15	25.1 30/20	5.4	
August ..	63.8	48.4	56.1	82.0 21/40	35.3 31/08	46.7	145.1 29/21	26.7 24/35	6.0	
September ..	66.8	50.4	58.6	90.9 30/18	36.7 22/56	54.2	153.6 29/16	27.2 (b)	7.2	
October ..	69.7	52.6	61.1	95.3 30/22	40.0 16/31	55.3	157.5 31/36	29.8 16/31	8.1	
November ..	76.7	57.3	67.0	104.6 24/13	42.0 1/04	62.6	167.0 30/25	35.5 (c)	9.6	
December ..	81.2	60.9	71.0	107.9 20/04	47.5 29/57	60.4	168.8 11/27	38.0 29/5 7	10.4	
Year { Averages ..	73.5	55.5	64.5	—	—	—	—	—	7.8	
Year { Extremes ..	—	—	—	112.2 8/2/33	34.2 7/7/16	78.0	177.3 22/1/14	25.1 30/7/20	—	

(a) Standard 30 years' normal (1911-1940).

(b) 8/52 and 6/56.

(c) 6/10 and 14/12.

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).				Fog.	
		Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.		
										No. of years over which observation extends.
No. of years over which observation extends.	30(a)	30(a)	59	59	30(a)	30(a)	82	82	82	30(a)
January ..	0.438	51	61	41	0.33	3	2.17 1879	Nil (b)	1.74 27/79	0
February ..	0.434	51	65	43	0.50	3	6.55 1955	Nil (b)	3.43 17/55	0
March ..	0.432	57	66	46	0.90	5	5.71 1934	Nil (b)	3.03 9/34	0
April ..	0.397	61	73	51	1.75	8	5.85 1926	Nil 1920	2.62 30/04	1
May ..	0.365	70	81	61	5.14	15	12.13 1879	0.98 1903	3.00 17/42	2
June ..	0.337	75	83	68	7.55	17	18.75 1945	2.16 1877	3.90 10/20	2
July ..	0.322	76	84	69	7.08	19	12.28 1926	2.42 1876	3.00 4/91	2
August ..	0.316	71	83	62	5.78	19	12.53 1945	0.46 1902	2.91 14/45	1
September ..	0.341	66	75	58	3.37	15	7.84 1923	0.34 1916	1.82 4/31	0
October ..	0.345	60	75	52	2.30	12	7.87 1890	0.15 1946	1.73 3/33	0
November ..	0.374	52	63	41	0.75	7	2.78 1916	Nil 1891	1.40 15/48	0
December ..	0.409	51	63	44	0.54	5	3.05 1888	Nil (c)	1.72 1/88	0
Year { Totals ..	—	—	—	—	35.99	128	—	—	—	8
Year { Averages ..	0.370	62	—	—	—	—	—	—	—	—
Year { Extremes ..	—	—	84	41	—	—	18.75 6/1945	Nil (d)	3.90 10/6/20	—

(a) Standard 30 years' normal (1911-1940).

(b) Various years.

(c) 1886 and 1924.

(d) November to April, various years.

CLIMATOLOGICAL DATA; DARWIN, NORTHERN TERRITORY.  
(LAT. 12° 28' S., LONG. 130° 51' E. HEIGHT ABOVE M.S.L. 97 Ft.)  
Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. M.S. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m., 9 p.m. (a)	No. of Clear Days.
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.					
					9 a.m.	3 p.m.				
No. of years of observations.	30	14	—	—	—	—	—	30	30	30
January	29.706	6.1	—	—	—	NW & S	W & NW	16	7.1	1
February	29.728	6.7	—	—	—	W & S	W & NW	16	7.0	1
March	29.751	5.3	—	—	—	SE	W & NW	14	6.2	3
April	29.809	6.1	—	—	—	SE	E	6	3.5	11
May	29.859	6.5	—	—	—	SE	E	1	2.1	19
June	29.892	6.5	—	—	—	SE	E & SE	0	1.6	22
July	29.911	6.2	—	—	—	SE	E & SE	0	1.4	23
August	29.914	5.9	—	—	—	SE	NW & N	0	1.3	23
September	29.886	6.2	—	—	—	SE & S	NW & N	1	2.0	18
October	29.850	6.2	—	—	—	S	NW & N	8	3.2	10
November	29.797	5.5	—	—	—	W & S	NW & N	17	4.8	4
December	29.738	6.2	—	—	—	NW & S	NW & N	17	6.0	2
Year { Totals ..	29.820	6.1	—	—	—	SE	NW	96	3.9	137
Year { Averages ..	—	—	—	—	—	—	—	—	—	—
Year { Extremes ..	—	—	—	—	—	—	—	—	—	—

(a) Scale 0-10.

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.	
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.		
										No. of years over which observation extends.
January	89.9	77.3	83.6	99.1	8/28	69.2	21/44	168.0	26/42	—
February	89.8	77.1	83.4	97.0	13/37	63.0	25/49	163.6	23/38	—
March	90.2	77.1	83.6	100.0	8/31	66.6	31/45	165.6	23/38	—
April	91.9	75.9	83.9	98.0	19/24	60.8	11/43	163.0	1/38	—
May	90.9	72.6	81.4	96.8	(b)	59.2	8/49	160.0	5/20	—
June	87.5	69.5	78.5	98.6	17/37	55.3	18/49	155.2	2/16	—
July	86.6	67.8	77.2	94.0	16/21	50.7	29/42	156.0	28/17	—
August	88.5	69.7	79.1	96.0	30/36	57.0	16/57	152.2	28/16	—
September	91.0	73.9	82.5	99.0	25/28	63.8	1/46	157.0	(c)	—
October	92.6	77.2	84.9	99.0	14/33	68.5	26/45	160.5	30/38	—
November	93.2	78.2	85.7	101.0	27/24	67.4	12/45	170.4	14/37	—
December	92.0	78.1	85.0	100.4	13/31	68.5	24/41	169.0	26/23	—
Year { Averages ..	90.3	74.5	82.4	—	—	—	—	170.4	—	—
Year { Extremes ..	—	—	—	101.0	27/11/24	50.7	29/7/42	—	14/11/37	—

(a) Years 1918-41 at Post Office, 1942-56 at aerodrome; sites not strictly comparable.  
(c) 28/16 and 3/21.

(b) 2/37 and 2/42.

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).					Fog. Mean No. of Days of Fog.			
		Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.				
											No. of years over which observation extends.	57	57
January	0.925	78	89	69	16.18	20	27.86	1906	2.25	1930	11.67	7/97	0.0
February	0.920	79	88	71	12.37	18	25.74	1955	0.44	1931	5.25	15/49	0.0
March	0.912	78	84	69	11.18	17	21.88	1898	0.81	1911	7.18	6/19	0.0
April	0.800	69	80	60	3.08	6	23.74	1891	Nil	(a)	5.51	1/29	0.0
May	0.652	63	76	49	0.33	1	14.00	1953	Nil	(a)	2.19	6/22	0.0
June	0.545	61	75	52	0.09	1	1.53	1902	Nil	(a)	1.32	10/02	0.4
July	0.522	59	71	47	0.01	0	2.56	1900	Nil	(a)	1.71	2/00	1.1
August	0.613	63	73	53	0.02	0	3.00	1870	Nil	(a)	1.06	14/09	0.7
September	0.732	65	73	54	0.60	2	2.72	1950	Nil	(a)	2.00	26/50	0.2
October	0.832	65	72	60	1.93	5	13.34	1954	Nil	(a)	3.74	18/56	0.0
November	0.868	68	75	62	4.32	10	15.72	1938	0.40	1870	4.73	9/51	0.0
December	0.890	73	83	65	8.57	15	22.38	1910	0.98	1934	7.87	28/10	0.0
Year { Totals ..	—	—	—	—	58.68	95	—	—	—	—	—	—	2.4
Year { Averages ..	0.764	68	—	—	—	—	—	—	—	—	—	—	—
Year { Extremes ..	—	—	89	47	—	—	27.86	1/06	Nil	(b)	11.67	7/1197	—

(a) Various years.

(b) April to October, various years.

**CLIMATOLOGICAL DATA; ADELAIDE, SOUTH AUSTRALIA.**  
 (LAT. 34° 56' S., LONG. 138° 35' E. HEIGHT ABOVE M.S.L. 140 FT.)  
 Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F., Mm. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 75 feet.)					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m. to 3 p.m., 9 p.m. to a.m.	No. of Clear Days.	
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.						
					9 a.m.	3 p.m.					
No. of years of observations.	30(b)	30(b)	80	41	30(b)	30(b)	30(b)	30(b)	30(b)		
January ..	29.917	9.9	31.6	19/99	72	SW	SW	9.27	2.3	3.6	12.9
February ..	29.953	8.8	28.8	22/96	64	NE	SW	7.56	2.0	3.7	11.2
March ..	30.037	8.3	26.2	9/12	67	S	SW	6.39	1.8	4.0	10.6
April ..	30.119	8.0	32.2	10/96	81	NE	SW	3.78	1.5	5.2	7.2
May ..	30.131	8.1	31.7	9/80	67	NE	NW	2.27	1.3	5.8	4.9
June ..	30.119	8.3	31.3	12/78	67	NE	N	1.37	1.3	6.1	4.1
July ..	30.111	8.5	28.1	25/82	60	NE	NW	1.34	1.5	6.0	4.3
August ..	30.084	9.2	32.2	31/97	57	NE	SW	1.99	2.0	5.5	5.6
September ..	30.050	9.2	30.0	2/87	69	NNE	SW	3.05	2.0	5.3	5.8
October ..	30.007	9.8	32.0	28/98	73	NNE	SW	5.03	2.8	5.3	5.7
November ..	29.990	9.9	32.2	7/48	79	SW	SW	6.89	3.3	4.9	7.2
December ..	29.922	9.9	28.1	12/91	75	SW	SW	8.74	2.2	4.2	9.5
Year { Totals ..	—	—	—	—	—	—	—	57.68	24.0	—	89.0
{ Averages ..	30.037	9.0	—	—	—	NE	SW	—	—	5.0	—
{ Extremes ..	—	—	32.2 (c)	81	—	—	—	—	—	—	—

(a) Scale 0-10. (b) Standard 30 years' normal (1911-1940). (c) 10/4/1896, 31/8/1897 and 7/11/1948.

**Temperature and Sunshine.**

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.				
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.					
										No. of years over which observation extends.			
No. of years over which observation extends.	30(a)	30(a)	30(a)	101	101	101	54(b)	95	30(a)				
January ..	84.8	61.0	72.9	117.7	12/39	45.1	21/84	72.6	180.0	18/82	36.5	14/79	10.0
February ..	85.7	61.8	73.7	113.6	12/99	45.5	23/18	68.1	170.5	10/00	35.8	23/26	9.3
March ..	81.3	59.1	70.2	110.5	9/34	43.9	21/33	66.6	174.0	17/83	32.1	21/33	7.9
April ..	73.0	54.4	63.7	98.6	5/38	39.6	15/59	59.0	155.0	1/83	30.2	16/17	6.0
May ..	66.8	50.8	58.8	89.5	4/21	36.9	26/95	52.6	148.2	12/79	25.6	19/28	4.8
June ..	61.0	46.6	53.8	76.0	23/65	32.5	(c)	43.5	138.8	18/79	21.0	24/44	4.2
July ..	59.9	45.4	52.7	74.0	11/06	32.0	24/08	42.0	134.5	26/90	22.1	30/29	4.3
August ..	62.3	46.2	54.3	85.0	31/11	32.3	17/59	52.7	140.0	31/92	22.8	11/29	5.4
September ..	66.8	48.3	57.5	91.3	29/44	32.7	4/58	58.6	160.5	23/82	25.0	25/27	6.3
October ..	72.5	51.7	62.1	102.9	21/22	36.0	—/57	66.9	162.0	30/21	27.8	(d)	7.3
November ..	78.1	55.4	66.7	113.5	21/65	40.8	2/09	72.7	166.9	20/78	31.5	2/09	8.6
December ..	82.6	58.9	70.7	114.6	29/31	43.0	(e)	71.6	175.7	7/99	32.0	4/84	9.5
Year { Averages ..	72.9	53.3	63.1	—	—	—	—	—	—	—	—	—	7.0
{ Extremes ..	—	—	—	117.7	12/11/39	32.0	24/7/08	85.7	180.0	18/11/82	21.0	24/6/44	—

(a) Standard 30 years' normal (1911-1940). (b) Records incomplete, 1931-34. Discontinued, 1934.  
 (c) 27/1876 and 24/1944. (d) 4/1931 and 2/1918. (e) 16/1861 and 4/1906.

**Humidity, Rainfall and Fog.**

Month.	Vapour Pressure (inches).	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).					Fog. Mean No. of Days of Fog.			
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.				
											No. of years over which observation extends.		
No. of years over which observation extends.	30(a)	30(a)	89	89	30(a)	30(a)	119	119	119	30(a)			
January ..	0.327	39	59	29	0.76	5	4.00	1850	Nil (b)	2.30	2/89	0.0	
February ..	0.352	41	56	30	1.10	5	6.09	1925	Nil (b)	5.57	7/25	0.0	
March ..	0.332	44	58	29	0.87	5	4.60	1878	Nil (b)	3.50	5/78	0.0	
April ..	0.329	55	72	37	1.45	10	6.78	1853	Nil 1945	3.15	5/60	0.0	
May ..	0.313	64	76	49	2.49	13	7.75	1875	0.10	1934	2.75	1/53	0.6
June ..	0.294	75	84	67	2.93	15	8.58	1916	0.42	1886	2.11	1/20	1.1
July ..	0.282	75	87	66	2.49	16	5.38	1865	0.37	1899	1.75	10/65	1.4
August ..	0.282	68	78	54	2.58	16	6.24	1852	0.33	1944	2.23	19/51	0.4
September ..	0.289	59	72	44	2.39	13	5.83	1923	0.27	1951	1.59	20/23	0.2
October ..	0.287	48	67	29	1.54	10	4.38	1948	0.17	1914	2.24	16/08	0.0
November ..	0.292	41	57	31	1.22	8	4.10	1934	0.04	1885	2.08	7/34	0.0
December ..	0.322	40	50	31	1.27	6	3.98	1861	Nil	1904	2.42	23/13	0.0
Year { Totals ..	—	—	—	—	21.09	122	—	—	—	—	—	—	3.7
{ Averages ..	0.304	52	—	—	—	—	—	—	—	—	—	—	—
{ Extremes ..	—	—	87	29	—	—	8.58	6/1916	Nil (c)	5.57	7/2/25	—	

(a) Standard 30 years' normal (1911-1940). (b) Various years. (c) December to April, various years.

CLIMATOLOGICAL DATA; BRISBANE, QUEENSLAND.  
(LAT. 27° 28' S., LONG. 153° 2' E. HEIGHT ABOVE M.S.L. 134 FT.)  
Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. M. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 105 feet.)						Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m., 9 p.m.(a)	No. of Clear Days.
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.						
					9 a.m.	3 p.m.					
No. of years of observations.	30(b)	30(b)	43	43	30(b)	30(b)	30(b)	30(b)	30(b)	30(b)	
January ..	29.865	6.8	19.7	23/47	58	SE	NE	6.74	9.8	5.7	3.5
February ..	29.912	7.0	23.2	21/54	67	SE	NE	5.49	6.5	5.6	2.4
March ..	29.975	6.5	20.3	1/29	65	S	E	5.05	5.9	5.1	5.4
April ..	30.035	5.9	16.7	3/25	57	S	E	4.05	5.0	4.3	7.8
May ..	30.083	5.8	17.9	17/26	49	SW	SE	3.09	4.1	4.3	8.3
June ..	30.091	5.7	19.0	14/28	58	SW	W & SW	2.45	2.9	4.4	9.2
July ..	30.090	5.6	22.0	13/54	52	SW	W & SW	2.69	2.8	3.8	12.4
August ..	30.105	5.8	14.8	4/35	56	SW	NE	3.51	3.8	3.1	13.1
September ..	30.067	5.9	16.1	1/48	57	SW	NE	4.51	5.8	3.3	13.0
October ..	30.019	6.3	15.7	1/41	62	S	NE	5.81	7.1	4.2	8.5
November ..	29.958	6.7	15.5	10/28	62	SE & N	NE	6.32	9.5	4.9	5.9
December ..	29.890	7.0	19.5	15/26	79	SE	NE	7.02	10.6	5.3	3.8
Year { Totals ..	—	—	—	—	—	—	—	56.73	73.8	—	93.3
Year { Averages ..	30.007	6.3	—	—	—	SW	NE	—	—	—	—
Year { Extremes ..	—	—	23.2	21/2/54	79	—	—	—	—	4.5	—

(a) Scale 0-10. (b) Standard 30 years' normal (1911-1940).

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.				
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.					
										71		71	
No. of years over which observation extends.	30(a)	30(a)	30(a)	71	71	71	50(b)	71	30(a)				
January ..	85.5	69.1	77.3	109.8	26/40	58.8	4/93	51.0	169.0	2/37	49.9	4/93	7.6
February ..	84.6	68.7	76.6	105.7	21/25	58.5	23/31	47.2	165.2	6/10	49.1	22/31	7.4
March ..	82.3	66.2	74.3	99.4	5/19	52.4	29/13	47.0	162.5	6/39	45.4	29/13	7.0
April ..	79.1	61.5	70.3	95.2	(c)	44.4	25/25	50.8	153.8	11/16	36.7	24/25	7.1
May ..	73.7	55.6	64.7	90.3	21/23	40.6	30/51	49.7	147.0	1/10	29.8	8/97	6.6
June ..	69.4	51.5	60.5	88.9	19/18	36.3	29/08	52.6	136.0	3/18	25.4	23/88	6.3
July ..	68.6	49.4	59.0	84.3	23/46	36.1	(d)	48.2	146.1	20/15	23.9	11/90	6.8
August ..	71.1	50.0	60.6	91.0	14/46	37.4	6/87	53.6	141.9	20/17	27.1	9/99	7.9
September ..	75.5	54.8	65.1	100.9	22/43	40.7	1/96	60.2	155.5	26/03	30.4	1/89	8.2
October ..	79.2	60.3	69.8	101.4	18/93	43.3	3/99	58.1	157.4	31/18	34.9	8/89	8.4
November ..	82.3	64.6	73.4	106.1	18/13	48.5	2/05	57.6	162.3	7/89	38.8	1/05	8.2
December ..	84.5	67.5	76.0	105.9	26/93	56.4	13/12	49.5	165.9	28/42	49.1	3/94	8.2
Year { Averages ..	78.0	59.9	69.0	—	—	—	—	—	—	—	—	—	7.5
Year { Extremes ..	—	—	—	109.8	26/1/40	36.1	(d)	73.7	169.0	2/11/37	23.9	11/7/90	—

(a) Standard 30 years' normal (1911-1940). (b) From 1887 to March, 1947, excluding 1927 to 1936. (c) 9/1896 and 5/1903. (d) 12/7/1894 and 2/7/1896.

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).					Fog. Mean No. of Days of Fog.			
		Mean 9 a.m.	Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.		Greatest in One Day.		
												106	
No. of years over which observation extends.	30(a)	30(a)	69	69	30(a)	30(a)	106	106(b)	106	30(a)			
January ..	0.636	66	79	53	5.72	12	27.72	1895	0.32	1919	18.31	21/87	0.6
February ..	0.644	69	82	55	5.47	12	40.39	1893	0.58	1849	10.61	6/31	0.9
March ..	0.606	72	85	56	4.97	14	34.04	1870	Nil	1849	11.18	14/08	1.6
April ..	0.512	71	80	56	3.68	11	15.28	1867	0.04	1944	5.46	5/33	4.0
May ..	0.420	71	85	59	2.35	9	13.85	1867	Nil	1846	5.62	9/79	5.4
June ..	0.357	73	84	54	2.75	8	14.03	1873	Nil	1847	6.41	15/48	4.5
July ..	0.331	71	88	53	1.88	8	8.60	1950	Nil	1841	3.54	(c)	4.9
August ..	0.338	67	80	53	1.07	7	14.67	1879	Nil	(d)	4.89	12/87	5.9
September ..	0.396	62	76	47	1.69	7	5.43	1886	0.10	1907	2.46	2/94	2.8
October ..	0.459	59	72	48	2.27	8	11.41	1949	0.03	1948	5.34	25/49	4.0
November ..	0.533	61	73	45	4.00	10	12.40	1917	Nil	1842	4.46	16/86	0.7
December ..	0.589	62	70	51	4.24	11	17.36	1942	0.35	1865	6.60	28/71	0.4
Year { Totals ..	—	—	—	—	40.09	117	—	—	—	—	—	—	33.3
Year { Averages ..	0.485	67	—	—	—	—	—	—	—	—	—	—	—
Year { Extremes ..	—	—	88	45	—	—	40.39	2/1893	Nil	(e)	18.31	21/11/87	—

(a) Standard 30 years' normal (1911-1940). (b) Records incomplete for various years between 1846 and 1859. (c) 15/1876 and 16/1889. (d) 1862, 1869, 1880. (e) Various months in various years.

**CLIMATOLOGICAL DATA: SYDNEY, NEW SOUTH WALES.**  
(LAT. 33° 52' S., LONG. 151° 12' E. HEIGHT ABOVE M.S.L. 138 FT.)  
**Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.**

Month.	Bar. corrected to 12° F. Mtn. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 58 feet.)					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m., 9 p.m. (g)	No. of Clear Days.	
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.						
					9 a.m.	3 p.m.					
No. of years of observations.	30(b)	26(c)	44(d)	38(e)	26(c)	26(c)	26(c)	30(f)	30(b)	30(b)	
January ..	29.875	8.9	24.9	2/22	74	S	ENE	5.71	4.8	5.7	4.8
February ..	29.942	8.1	23.5	19/57	63	NE	ENE	4.68	3.3	5.5	4.4
March ..	30.009	7.5	20.7	10/44	58	W	ENE	4.05	2.8	5.5	4.8
April ..	30.063	7.0	23.4	19/27	72	W	NE	2.91	2.4	5.5	7.0
May ..	30.098	6.8	19.6	2/26	63	W	W	2.17	1.6	4.9	7.0
June ..	30.078	7.1	24.5	17/14	73	W	W	1.61	1.5	4.8	8.3
July ..	30.070	7.2	26.6	6/31	68	W	W	1.69	2.1	4.9	10.1
August ..	30.060	7.4	24.6	9/51	68	W	NE	2.30	2.1	5.9	11.1
September ..	30.018	8.0	22.3	19/17	70	W	NE	3.00	3.0	5.2	10.0
October ..	29.976	8.2	23.3	2/57	95	W	ENE	4.17	3.9	4.9	10.4
November ..	29.935	8.5	22.6	14/30	71	W & E	ENE	4.97	4.5	5.5	5.7
December ..	29.881	8.9	24.9	10/20	75	S	ENE	5.64	5.4	5.8	4.8
Year { Totals ..	30.000	7.8	—	—	—	W	NE	42.90	36.4	—	87.8
Year { Averages ..	—	—	—	—	—	—	—	—	—	5.0	—
Year { Extremes ..	—	—	26.6	6/7/31	95	—	—	—	—	—	—

(a) Scale 0-10. (b) Standard 30 years' normal (1911-1940). (c) 1915-1940. (d) 1914-1953. (e) 1917-1954. (f) 1921-1950.

**Temperature and Sunshine.**

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.				
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.					
										99	99	84	99
No. of years over which observation extends.	30(a)	30(a)	30(a)	99	99	99	84	99	30(b)				
January ..	78.6	65.1	71.8	113.6	14/39	51.1	18/49	62.5	164.3	26/15	43.7	6/25	7.5
February ..	78.7	65.5	72.1	107.8	8/26	49.3	28/63	58.5	168.3	14/39	42.8	22/33	7.0
March ..	76.6	62.9	69.8	102.6	3/69	48.8	14/86	53.8	158.3	10/26	39.9	17/13	6.4
April ..	72.0	57.7	64.9	91.4	1/36	44.6	27/64	46.8	144.1	10/77	33.3	24/09	6.1
May ..	67.0	52.4	59.7	86.0	1/19	40.2	22/59	45.8	129.7	1/96	29.3	25/17	5.7
June ..	62.8	48.1	55.5	80.4	11/31	35.7	22/32	44.7	125.5	2/23	28.0	22/32	5.3
July ..	61.8	46.4	54.1	78.3	22/26	35.9	12/90	42.4	124.7	19/77	24.0	4/93	6.1
August ..	64.3	47.6	56.0	82.8	12/46	36.8	3/72	46.0	149.0	30/78	26.1	4/09	7.0
September ..	68.3	51.4	59.9	92.3	27/19	40.8	2/45	51.5	142.2	12/78	30.1	17/05	7.3
October ..	71.7	55.9	63.8	99.4	4/42	42.2	6/27	57.2	152.2	20/33	32.7	9/05	7.5
November ..	74.5	59.8	67.1	104.5	6/46	45.8	1/05	61.3	158.5	28/99	36.0	6/06	7.5
December ..	76.9	63.2	70.1	108.0	20/57	48.4	3/24	59.6	164.5	27/89	41.4	3/24	7.5
Year { Averages ..	71.1	56.3	63.7	—	—	—	—	—	—	—	—	—	6.8
Year { Extremes ..	—	—	—	113.6	14/11/39	35.7	22/6/32	77.9	168.3	14/2/39	24.0	4/7/93	—

(a) Standard 30 years' normal (1911-1940). (b) 1921-1950 (different exposure prior to 1921).

**Humidity, Rainfall and Fog.**

Month.	Vapour Pressure (inches).	Rel. Hum. (%) at 9 a.m.				Rainfall (inches).				Fog. Mean No. of Days of Fog.			
		Mean 9 a.m.	Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.		Greatest in One Day.		
												80	80
No. of years over which observation extends.	30(a)	30(a)	80	80	30(a)	30(a)	99	99	99	30(b)			
January ..	0.537	65	78	58	3.86	13	15.26	1911	0.25	1932	7.08	13/11	0.4
February ..	0.560	68	81	60	3.15	12	22.22	1956	0.12	1939	8.90	25/73	0.8
March ..	0.527	71	85	62	4.44	13	20.52	1942	0.42	1876	11.05	28/42	1.8
April ..	0.441	73	87	63	5.65	14	24.49	1861	0.06	1868	7.52	29/60	2.8
May ..	0.362	75	90	63	4.98	12	23.03	1919	0.14	1957	8.36	28/89	2.7
June ..	0.303	76	89	63	3.68	11	25.30	1950	0.19	1904	5.17	16/84	3.3
July ..	0.282	74	88	63	4.89	12	13.23	1950	0.10	1946	7.80	7/31	2.9
August ..	0.288	68	84	54	2.41	10	14.89	1899	0.04	1885	5.33	2/60	2.3
September ..	0.325	62	79	49	2.77	11	14.05	1879	0.28	1882	5.69	10/79	1.0
October ..	0.378	60	77	46	2.80	11	11.13	1916	0.01	1867	6.37	13/02	0.6
November ..	0.433	60	79	42	2.54	11	9.88	1865	0.07	1915	4.23	19/00	0.6
December ..	0.501	63	77	51	3.63	13	15.82	1920	0.23	1913	4.75	13/10	0.4
Year { Totals ..	—	—	—	—	44.80	143	—	—	—	—	—	—	20.6
Year { Averages ..	0.393	68	—	—	—	—	—	—	—	—	—	—	—
Year { Extremes ..	—	—	90	42	—	—	25.30	6/1950	0.04	8/1885	11.05	28/3/42	—

(a) Standard 30 years' normal (1911-1940). (b) 1921-1950.

CLIMATOLOGICAL DATA; CANBERRA, AUSTRALIAN CAPITAL TERRITORY.

(LAT. 35° 18' S., LONG. 149° 6' E. HEIGHT ABOVE M.S.L., 1,906 FT.)

Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. Min. Sea level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 20 feet.)					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds 9 a.m. and 3 p.m. (e)	No. of Clear Days.	
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.						
					9 a.m.	3 p.m.					
No. of years of observations.	26	27	28	(b)	27	27	28	20	26	27	
January ..	29.856	4.7	14.9	23/33	—	NW	NW	8.31	1.5	4.9	7.3
February ..	29.900	4.2	15.3	24/33	—	E	NW	6.42	2.3	5.1	6.3
March ..	30.009	3.7	18.2	28/42	—	—	NW	5.20	0.2	5.1	6.9
April ..	30.059	3.6	18.6	8/45	—	NW	NW	3.28	0.3	5.4	4.7
May ..	30.126	3.0	12.6	3/30	—	NW	NW	1.95	0.2	5.6	5.8
June ..	30.120	3.6	16.1	7/31	—	NW	NW	1.29	0.1	6.0	5.3
July ..	30.133	3.4	23.4	7/31	—	NW	NW	1.27	0.0	5.7	5.6
August ..	30.065	4.1	15.7	25/36	—	NW	NW	1.81	0.1	5.4	5.7
September ..	30.057	4.2	17.4	28/34	—	NW	NW	2.87	0.4	5.1	6.1
October ..	29.954	4.3	14.7	12/57	—	NW	NW	4.43	1.0	5.4	5.2
November ..	29.885	4.7	17.2	28/42	—	NW	NW	5.87	1.1	5.5	4.5
December ..	29.834	4.7	16.1	11/38	—	NW	NW	7.64	0.7	5.0	6.3
Year { Totals ..	30.000	4.0	—	—	—	NW	NW	50.34	7.9	—	68.9
{ Averages ..	—	—	—	23.4 7/7/31	—	—	—	—	—	—	—
{ Extremes ..	—	—	—	—	—	—	—	—	—	—	—

(a) Scale 0-10.

(b) No record.

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.				
	Mean.	Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.					
										30	30	(a)	30
No. of years over which observation extends.	29	29	29	30	30	30	—	—	27				
January ..	82.4	56.0	69.2	107.4	11/39	38.0	1/56	69.4	—	30.1	10/50	8.4	
February ..	80.7	56.1	68.4	99.8	13/33	35.0	(b)	64.8	—	26.5	23/43	7.3	
March ..	76.2	52.7	64.4	99.1	6/38	34.8	31/49	64.3	—	26.4	26/35	7.2	
April ..	66.7	45.5	56.1	89.7	6/38	29.0	29/34	60.7	—	19.0	18/44	6.7	
May ..	59.3	39.1	49.2	72.6	1/36	22.5	(c)	50.1	—	15.6	(d)	5.2	
June ..	52.6	35.7	44.1	64.9	1/54	18.1	20/35	43.9	—	8.9	25/44	4.2	
July ..	51.8	33.8	42.8	63.5	16/34	20.0	(e)	43.5	—	10.8	9/37	4.8	
August ..	55.1	35.4	45.3	71.0	24/54	21.0	3/29	49.5	—	10.1	6/44	5.8	
September ..	61.4	38.9	50.1	81.5	16/34	25.2	6/46	56.3	—	13.0	6/45	7.2	
October ..	67.0	44.2	55.6	90.0	13/46	29.0	24/28	61.0	—	18.2	2/45	7.8	
November ..	72.9	48.7	60.8	101.4	19/44	32.2	11/36	69.2	—	22.9	6/56	8.2	
December ..	79.5	53.3	66.4	103.5	27/38	36.0	24/28	67.5	—	29.1	21/56	8.5	
Year { Averages ..	67.1	44.9	56.0	—	—	—	—	—	—	—	—	6.8	
{ Extremes ..	—	—	—	107.4	11/11/39	18.1	20/6/35	89.3	—	—	8.9	25/6/44	—

(a) No record. 9/37 and 27/43.

(b) 22/31 and 23/31.

(c) 9/29 and 25/57.

(d) 13/37 and 15/46.

(e) 19/29.

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches).	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).				Fog. Mean No. of Days of Fog.				
		Mean.	Highest.	Lowest.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.		Greatest in One Day.			
											28	28	28
No. of years over which observation extends.	26	28	28	28	29	29	30	30	30	25			
January ..	0.370	53	69	39	2.13	7	6.69	1941	0.02	1932	2.47	19/50	0.1
February ..	0.388	59	71	40	2.17	7	6.03	1948	0.01	1933	3.24	17/28	0.2
March ..	0.378	66	82	48	2.48	7	12.69	1950	0.01	1940	2.53	20/52	1.0
April ..	0.315	71	81	54	2.17	8	5.19	1952	0.07	1942	2.52	9/45	1.4
May ..	0.254	79	89	67	2.06	8	6.13	1948	0.06	1935	3.88	3/48	4.8
June ..	0.212	81	90	72	1.92	9	6.09	1931	0.18	1944	2.32	25/56	5.8
July ..	0.196	81	91	73	1.61	10	4.09	1933	0.27	1940	2.02	13/33	5.9
August ..	0.213	75	88	60	1.98	11	4.71	1939	0.36	(a)	2.07	12/29	2.4
September ..	0.239	66	78	51	1.62	9	3.03	1937	0.13	1946	1.75	3/47	1.4
October ..	0.273	60	72	46	2.77	11	6.59	1934	0.34	1940	2.51	25/34	0.4
November ..	0.301	55	67	38	2.11	8	4.45	1950	0.28	1936	2.45	9/50	0.1
December ..	0.338	51	70	37	1.86	8	8.80	1947	0.16	1938	2.29	28/29	0.0
Year { Totals ..	—	—	—	—	24.88	103	—	—	—	—	—	—	22.9
{ Averages ..	0.286	66	—	—	—	—	—	—	—	—	—	—	—
{ Extremes ..	—	—	91	37	—	—	12.69	3/50	0.01	2/33,3/40	3.88	3/5/48	—

(a) 1944 and 1949.

**CLIMATOLOGICAL DATA; MELBOURNE, VICTORIA.**  
(LAT. 37° 49' S., LONG. 144° 58' E. HEIGHT ABOVE M.S.L. 114 FT.)  
Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. Ven. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 93 feet.)					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m., 9 p.m.(g)	No. of Clear Days.	
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.						
					9 a.m.	3 p.m.					
No. of years of observations.	30(b)	15(c)	45	48	30(b)	30(b)	30(b)	30(b)	30(b)		
January	29.897	8.8	21.1	27/41	66	S & SW	S	6.55	1.8	4.9	6.8
February	29.950	8.4	19.0	13/47	74	N & S	S	5.10	2.3	4.8	6.4
March	30.025	7.8	17.2	19/50	66	N	S	4.26	1.8	5.3	5.5
April	30.092	7.1	19.9	16/43	67	N	S	2.53	1.2	5.9	4.6
May	30.113	7.4	21.8	1/57	72	N	S	1.57	0.5	6.1	3.4
June	30.097	7.2	22.8	16/47	62	N	N	1.18	0.4	6.5	2.7
July	30.079	8.7	20.9	9/44	68	N	N	1.16	0.3	6.3	2.9
August	30.048	8.2	21.3	20/42	65	N	N	1.54	0.9	6.0	3.1
September	30.001	8.5	20.9	15/57	69	N & W	N & S	2.41	1.3	5.9	3.5
October	29.968	8.4	18.6	12/52	69	N	S	3.54	1.8	6.1	3.8
November	29.951	8.6	19.4	4/50	71	S & SW	S	4.62	2.3	6.0	3.6
December	29.896	8.7	21.0	11/52	61	S & SW	S	5.85	1.9	5.6	4.5
Year { Totals	30.010	8.1	—	—	—	N	S	40.31	16.5	—	50.6
Year { Averages	—	—	—	—	—	—	—	—	—	—	—
Year { Extremes	—	—	22.8	16/6/47	74	—	—	—	—	—	—

(a) Scale 0-10. (b) Standard 30 years' normal (1911-1940). (c) Early records not comparable.

**Temperature and Sunshine.**

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.				
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.					
										No. of years over which observation extends.			
No. of years over which observation extends.	30(a)	30(a)	30(a)	102	102	102	86(b)	98	35(c)				
January	77.7	56.9	67.3	114.1	13/39	42.0	28/85	72.1	178.5	14/62	30.2	28/85	7.8
February	78.6	58.0	68.3	109.5	7/01	40.2	24/24	69.3	167.5	15/70	30.9	6/91	7.4
March	74.9	55.2	65.1	107.0	11/40	37.1	17/84	69.9	164.5	1/68	28.9	(d)	6.5
April	67.9	50.8	59.3	94.8	5/38	34.8	24/88	60.0	152.0	8/61	25.0	23/97	5.0
May	62.0	46.9	54.5	83.7	7/05	29.9	29/116	53.8	142.6	2/59	21.1	26/16	4.1
June	56.8	43.8	50.3	72.3	2/57	28.0	11/66	44.3	129.0	11/61	19.9	30/29	3.4
July	56.2	42.6	49.4	69.3	22/26	27.0	21/69	42.3	125.8	27/80	20.5	12/03	3.7
August	58.7	43.7	51.2	77.0	20/85	28.3	11/63	48.7	137.4	29/69	21.3	14/02	4.6
September	63.3	46.0	54.7	88.6	28/28	31.0	3/40	57.6	142.1	20/67	22.8	8/18	5.5
October	67.9	48.7	58.3	98.4	24/14	32.1	3/71	66.3	154.3	28/68	24.8	22/18	5.8
November	71.3	51.8	61.5	105.7	27/94	36.5	2/96	69.2	159.6	29/65	24.6	2/96	6.2
December	75.4	55.3	65.3	110.7	15/76	40.0	4/70	70.7	170.3	20/69	33.2	1/04	7.0
Year { Averages	67.6	50.0	58.8	—	—	—	—	—	—	—	—	—	—
Year { Extremes	—	—	—	114.1	13/11/39	27.0	21/7/69	87.1	178.5	14/11/62	19.9	30/6/29	—

(a) Standard 30 years' normal (1911-1940). (b) Records discontinued, 1946. (c) 1916-1950. (d) 17/1884 and 20/1897.

**Humidity, Rainfall and Fog.**

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).					Fog. Mean No. of Days of Fog.			
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.				
											No. of years over which observation extends.		
No. of years over which observation extends.	30(a)	30(a)	48	48	30(a)	30(a)	102	102	102	30(a)			
January	0.382	58	68	50	1.88	9	6.66	1941	0.01	1932	2.97	9/97	0.1
February	0.417	62	77	48	2.00	8	7.72	1939	0.03	1870	3.44	26/46	0.3
March	0.385	64	79	50	2.22	9	7.50	1911	0.14	1934	3.55	5/19	1.1
April	0.351	72	82	66	2.30	13	6.71	1901	Nil	1923	2.28	22/01	2.3
May	0.311	79	88	70	1.94	14	5.60	1942	0.14	1934	1.85	7/91	6.8
June	0.276	83	92	75	2.06	16	4.51	1859	0.73	1877	1.74	21/04	6.5
July	0.264	82	86	75	1.93	17	7.02	1891	0.57	1902	2.71	12/91	6.5
August	0.271	76	82	65	2.02	17	4.35	1939	0.48	1903	1.94	26/24	3.7
September	0.288	68	76	60	2.20	15	7.93	1916	0.52	1907	2.62	12/80	1.3
October	0.307	62	67	52	2.63	14	7.61	1869	0.29	1914	3.00	17/69	0.3
November	0.336	60	69	52	2.33	13	8.11	1954	0.25	1895	2.86	21/54	0.3
December	0.373	59	69	48	2.38	11	7.18	1863	0.11	1904	3.92	4/54	0.2
Year { Totals	—	—	—	—	25.89	156	—	—	—	—	—	—	—
Year { Averages	0.323	69	—	—	—	—	—	—	—	—	—	—	—
Year { Extremes	—	—	92	48	—	—	8.11	11/1954	Nil	4/1923	3.92	4/12/54	—

(a) Standard 30 years' normal (1911-1940).

**CLIMATOLOGICAL DATA; HOBART, TASMANIA.**  
(LAT. 42° 53' S., LONG. 147° 20' E. HEIGHT ABOVE M.S.L. 177 FT.)  
**Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.**

Month.	Bar. corrected to 32° F. Mm. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m., 9 p.m.(g)	No. of Clear Days.	
		(Height of Anemometer 40 feet.)									
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.						
No. of years of observations.	30(b)	30(b)	65	65	9 a.m.	3 p.m.	30(b)	30(b)	30(b)		
January ..	29.819	8.0	20.8	30/16	76	NNW	SSE	4.84	0.9	6.4	1.9
February ..	29.913	7.2	25.2	4/27	65	NNW	SSE	3.71	1.0	6.2	2.3
March ..	29.961	6.8	21.4	13/38	75	NW	SSE	3.10	1.2	6.1	2.4
April ..	29.997	6.7	24.1	9/52	74	NW	W	1.98	0.7	6.5	1.7
May ..	30.009	6.3	20.2	20/36	79	NNW	NW	1.37	0.4	6.1	2.4
June ..	29.986	6.2	23.7	27/20	71	NW	NW	0.91	0.4	6.2	2.4
July ..	29.958	6.5	22.9	22/53	78	NNW	NNW	0.94	0.3	6.1	2.0
August ..	29.906	6.8	25.5	19/26	87	NNW	NW	1.28	0.4	6.1	2.1
September ..	29.860	7.9	21.5	26/15	84	NNW	NW	1.97	0.7	6.3	1.5
October ..	29.833	8.2	19.2	8/12	74	NNW	SW	3.05	0.6	6.6	1.0
November ..	29.831	7.9	21.2	18/15	73	NNW	S	3.77	0.7	6.4	1.3
December ..	29.816	7.6	23.4	1/34	70	NNW	SSE	4.37	0.5	6.8	1.1
Year { Totals ..	29.907	7.2	—	—	—	NNW	W	31.29	7.8	—	22.1
Year { Averages ..	—	—	—	—	—	—	—	—	—	—	—
Year { Extremes ..	—	—	25.5	19/8/26	87	—	—	—	—	—	—

(a) Scale 0-10. (b) Standard 30 years' normal (1911-1940).

**Temperature and Sunshine.**

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.				
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.					
										30(a)	30(a)	30(a)	88(b)
January ..	69.8	52.4	61.0	105.0	1/00	40.1 (d)	64.9	160.0 (e)	30.6	19/97	7.7		
February ..	70.6	53.7	62.2	104.4	12/99	39.0	20/87	65.4	165.0	24/98	28.3	—/87	7.1
March ..	67.5	51.3	59.4	99.1	13/40	35.2	31/26	63.9	150.9	26/44	27.5	30/02	6.4
April ..	62.2	48.0	55.1	87.1	1/41	33.3	24/88	53.8	142.0	18/93	25.0	—/86	5.0
May ..	57.8	44.6	51.2	77.8	5/21	29.2	20/02	48.6	128.0 (f)	20.0	19/02	4.4	
June ..	52.8	41.2	47.0	69.2	1/07	29.2	28/44	40.0	122.0	12/94	21.0	6/87	4.0
July ..	52.7	40.6	46.6	66.1	14/34	27.7	11/95	38.4	121.0	12/93	18.7	16/86	4.4
August ..	55.4	41.7	48.7	71.6	28/14	28.9	9/51	42.7	129.0	—/87	20.1	7/09	5.1
September ..	59.0	43.7	51.4	81.7	23/26	31.0	16/97	50.7	138.0	23/93	18.3	16/26	5.9
October ..	62.5	46.1	54.3	92.0	24/14	32.0	12/89	60.0	156.0	9/93	23.8	(g)	6.1
November ..	65.0	48.2	56.6	98.3	26/37	35.0	16/41	63.3	154.0	19/92	26.0	1/08	7.2
December ..	67.9	51.3	59.6	105.2	30/97	38.0	3/06	67.2	161.5	10/39	27.2	—/86	7.3
Year { Averages ..	61.9	46.9	54.4	—	—	—	—	—	—	—	—	—	5.9
Year { Extremes ..	—	—	—	105.2	30/12/97	27.7	11/7/95	77.5	165.0	24/2/98	18.3	16/9/26	—

(a) Standard 30 years' normal (1911-1940). (b) Records 1855-1882 not comparable. (c) Period 1934-1938 not comparable; records discontinued, 1946. (d) 9/37 and 11/37. (e) 5/86 and 13/05. (f) —/89 and —/93. (g) 1/86 and —/99.

**Humidity, Rainfall and Fog.**

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).					Fog. Mean No. of Days of Fog.			
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.				
											30(a)	30(a)	75(b)
January ..	0.309	59	72	46	1.82	13	5.91	1893	0.17	1915	2.96	30/16	0.0
February ..	0.342	63	77	48	1.68	10	5.01	1956	0.11	1914	2.20	1/54	0.0
March ..	0.323	67	77	52	2.13	13	10.05	1946	0.29	1943	3.47	17/46	0.3
April ..	0.290	72	84	58	2.31	14	8.50	1935	0.07	1904	5.02	20/09	0.2
May ..	0.263	78	89	65	1.71	14	6.37	1905	0.14	1913	1.75	2/93	0.9
June ..	0.233	80	91	68	2.25	16	8.15	1889	0.28	1886	5.80	7/54	0.8
July ..	0.227	80	94	72	2.14	17	6.02	1922	0.17	1950	2.51	18/22	1.0
August ..	0.232	76	92	60	1.82	18	6.32	1946	0.30	1892	2.28	14/90	0.4
September ..	0.240	67	85	58	1.90	17	7.93	1957	0.38	1951	6.15	15/57	0.1
October ..	0.258	63	73	51	2.52	18	7.60	1947	0.39	1914	2.58	4/06	0.0
November ..	0.274	60	72	50	2.23	16	7.39	1885	0.33	1921	3.70	30/85	0.1
December ..	0.306	58	67	45	2.52	14	7.72	1916	0.17	1931	3.33	5/41	0.0
Year { Totals ..	—	—	—	—	25.03	180	—	—	—	—	—	—	3.8
Year { Averages ..	0.271	69	—	—	—	—	—	—	—	—	—	—	—
Year { Extremes ..	—	—	94	45	—	—	10.05	3/1946	0.07	4/1904	5.80	7/6/54	—

(a) Standard 30 years' normal (1911-1940). (b) Records prior to 1883 not comparable. (c) 1922-1951.

## CHAPTER III.

## GENERAL GOVERNMENT.

## § 1. Scheme of Parliamentary Government.

1. **General.**—The legislative power of the Commonwealth is vested in the Parliament of the Commonwealth, which consists of the Sovereign, the Senate, and the House of Representatives. The Sovereign is represented throughout the Commonwealth by the Governor-General who, subject to the Constitution of the Commonwealth, has such powers and functions as the Sovereign is pleased to assign to him. In each State, there is a State Governor who is the representative of the Sovereign for the State and who exercises such powers within the State as are conferred upon him by the Letters Patent which constitute his office and by the instructions which inform him in detail of the manner in which his duties are to be fulfilled. The Legislature in each State was bi-cameral until 1922, in which year the Queensland Parliament became uni-cameral. In the bi-cameral States, it consists of (a) a Legislative Council and (b) a Legislative Assembly or House of Assembly. In Queensland, the Legislative Assembly constitutes the legislature. The Upper House is known as the Senate in the Commonwealth Parliament, and as the Legislative Council in the State Parliaments. The Lower House in the bi-cameral Parliaments is known as the House of Representatives in the Commonwealth Parliament, as the Legislative Assembly in the State Parliaments of New South Wales, Victoria and Western Australia, and as the House of Assembly in the State Parliaments of South Australia and Tasmania. The legislative powers of these Parliaments are delimited by the Commonwealth and the State Constitutions. The Assembly, which is the the larger House, (Queensland as pointed out above is uni-cameral) is, in all cases, elective, the franchise extending to adult British subjects with certain residential qualifications. The Council in each of the States other than New South Wales is elected by the people of the State concerned, the constituencies being differently arranged and, in general, some property or special qualification for the electorate being required. In Victoria, however, under the Legislative Council Reform Act passed in October, 1950, adult suffrage was adopted for Legislative Council elections. In the case of New South Wales, the Council is elected by the members of both Houses of Parliament at a simultaneous sitting. In the Federal Parliament, the qualifications for the franchise are identical for both Houses, extending to adult British subjects who have lived in Australia for six months continuously.

2. **The Sovereign.**—(i) *Accession of Queen Elizabeth II.* On 7th February, 1952, the Governor-General and members of the Federal Executive Council proclaimed Princess Elizabeth Queen Elizabeth the Second, Queen of this Realm and of all her other Realms and Territories, Head of the Commonwealth, Defender of the Faith, Supreme Liege Lady in and over the Commonwealth of Australia. The coronation of Her Majesty in Westminster Abbey took place on 2nd June, 1953.

(ii) *Royal Style and Titles Act 1953.* At a conference of Prime Ministers and other representatives of the British Commonwealth in London in December, 1952, it was agreed that the Royal Style and Titles then in use were not in accord with current relationships within the British Commonwealth and that there was need of a new form which would, in particular, “reflect the special position of the Sovereign as Head of the Commonwealth”.

It was therefore decided that each member of the British Commonwealth should use a form of the Royal Style and Titles suited for its own circumstances, while retaining as a common element the description “Queen of Her other Realms and Territories and Head of the Commonwealth”; and that consultation between all countries of the Commonwealth should take place on any future proposal to change the form of the Royal Style and Titles used in any country.

To give effect to these decisions in Australia, the Royal Style and Titles Act was passed on 3rd April, 1953, giving Parliament's assent to the adoption by the Queen, for use in relation to the Commonwealth of Australia and its Territories, of the following Royal Style and Titles :—“Elizabeth the Second, by the Grace of God of the United Kingdom,

Australia and Her other Realms and Territories Queen, Head of the Commonwealth, Defender of the Faith." The Act also approves the adoption by the Queen of a Royal Style and Titles for use in relation to other countries of the British Commonwealth in accordance with the principles formulated at the London conference.

(iii) *Authorization of a Royal Great Seal.* By warrant published in the Commonwealth Gazette of 17th November, 1955, Her Majesty authorized the Great Seal of the Commonwealth to be used as a Royal Great Seal in sealing all things whatsoever (other than things that pass the said Great Seal) that bear Her Majesty's Sign Manual and the counter-signature of one of Her Ministers of State for the Commonwealth.

### 3. Powers and Functions of the Governor-General and of the State Governors.—

(i) *Governor-General of the Commonwealth.* Section 2 of the Commonwealth Constitution provides as follows :—

" A Governor-General appointed by the Queen shall be Her Majesty's representative in the Commonwealth, and shall have and may exercise in the Commonwealth during the Queen's pleasure, but subject to this Constitution, such powers and functions of the Queen as Her Majesty may be pleased to assign to him."

As the Queen's representative in Australia, the Governor-General exercises certain prerogative powers and functions assigned to him by the Queen—either by Letters Patent (see Letters Patent dated 29th October, 1900, and 15th December, 1920), by Instructions under the Royal Sign Manual and Signet, by Commission issued to him under the Royal Sign Manual and Signet, or by any instrument of delegation under section 2 of the Constitution. Powers which have been so assigned include, amongst others, the power to appoint a Deputy or Deputies of the Governor-General, to administer or authorize any other person to administer the Oath of Allegiance, to grant pardons and to remit fines for offences against the laws of the Commonwealth and to appoint certain officers in the Diplomatic or Consular Service of the Commonwealth.

Other powers and functions are conferred on the Governor-General by the Constitution. For example, under section 5 of the Constitution he may appoint times for holding the sessions of the Parliament, prorogue Parliament and dissolve the House of Representatives. Under section 32, the Governor-General in Council may cause writs to be issued for general elections of members of the House of Representatives. Under section 58, he assents in the Queen's name to a proposed law passed by both Houses of the Parliament or withholds assent, or reserves the law for the Queen's pleasure; or he may return the proposed law to the House in which it originated and may transmit therewith any amendments which he may recommend. Under section 61, he exercises the executive power of the Commonwealth, under section 62, he chooses and summons Executive Councillors, who hold office during his pleasure, and under section 64, he may appoint Ministers of State for the Commonwealth. By section 68, the command in chief of the naval and military forces of the Commonwealth is vested in the Governor-General, as the Queen's representative. Under the conventions of responsible government obtaining in Commonwealth countries, the Governor-General's executive functions generally are exercised on the advice of Ministers of State. In this regard, the Governor-General's position has become assimilated to that of the Queen in relation to her Ministers of State for the United Kingdom.

In addition, many powers and functions are exercised by the Governor-General under Acts of the Commonwealth Parliament. Most Acts, for example, provide that the Governor-General may make regulations, not inconsistent with the Act, either generally to give effect to the Act or to cover certain matters specified in the power. The Governor-General may be authorized by statute to issue proclamations—for example, to declare an Act in force or a state of things to exist, e.g. the existence of an epidemic. The Governor-General has been given power by statute to legislate for certain Territories of the Commonwealth. Other statutory powers include the power to appoint and dismiss certain office holders. A reference to the Governor-General, in Acts of the Commonwealth Parliament, means, unless the contrary intention appears, the Governor-General acting with the advice of the Executive Council (Acts Interpretation Act 1901–1957, section 16A).

(ii) *Governors of the States.* The Queen is represented in each of the States by a Governor, the office having been constituted by Letters Patent under the Great Seal of the United Kingdom of various dates.

The Governors of the States exercise prerogative powers conferred on them by these Letters Patent, their Commissions of appointment, and the "Governor's Instructions" given them under the Royal Sign Manual and Signet or other instrument as specified in the Letters Patent. In addition they have been invested with various statutory functions, either under the State Constitutions, conferred by Imperial Act, or by Act of the Parliament of the State.

A Governor of a State assents in the Queen's name to Bills passed by the Parliament of the State, except those reserved for the Royal assent. The latter include certain classes of Bills, which are regulated by the Constitution Acts and by the Governor's Instructions. He administers the prerogative of mercy by the reprieve or pardon of criminal offenders within his jurisdiction, and may remit fines and penalties due to the Crown.

In the performance of his functions generally, particularly those conferred by Statute, the Governor of a State acts on the advice of Ministers of State for the State.

(iii) *Holders of Office.* For the names of the Governors-General since the inception of the Commonwealth and of the present State Governors, see § 3., page 79.

4. **The Cabinet and Executive Government.**—(i) *General.* Both in the Commonwealth and in the States, executive government is based on the system which was evolved in Britain in the 18th century, and which is generally known as "Cabinet" or "responsible" government. Its essence is that the head of the State (Her Majesty the Queen, and her representative, the Governor-General or Governor) should perform Governmental acts on the advice of her Ministers; that she should choose her principal Ministers of State from members of Parliament belonging to the party, or coalition of parties, commanding a majority in the popular House; that the Ministry so chosen should be collectively responsible to that House for the government of the country; and that the Ministry should resign if it ceases to command a majority there.

The Cabinet system operates chiefly by means of constitutional conventions, customs or understandings, and through institutions that do not form part of the legal structure of the government at all. The constitutions of the Commonwealth and the States make fuller legal provision for the Cabinet system than the British Constitution does—for example, by requiring that Ministers shall either be, or within a prescribed period become, members of the Legislature. In general, however, the legal structure of the executive government remains the same as it was before the establishment of the Cabinet system.

The executive power of the Commonwealth is exercisable by the Governor-General, and that of the States by the Governor. In each case, he is advised by an Executive Council, which, however, meets only for certain formal purposes, as explained below. The whole policy of a Ministry is, in practice, determined by some or all of the Ministers of State, meeting without the Governor-General or Governor under the chairmanship of the Prime Minister or Premier. This group of Ministers is known as the Cabinet.

(ii) *The Cabinet.* This body does not form part of the legal mechanism of government. Its meetings are private and deliberative. The actual Ministers of the day alone are present, no records of the meetings are made public, and the decisions taken have, in themselves, no legal effect. In Australia, until January, 1956, all Ministers were members of the Cabinet. Since then, however, although in the States all Ministers are members of the Cabinet, the Commonwealth ministry is made up of twelve senior Ministers, who constitute the Cabinet, and ten Ministers of non-Cabinet rank who attend meetings of the Cabinet only when required, as, for example, when the business of the Cabinet concerns their departments. As Ministers are the leaders of the party or parties commanding a majority in the popular House, the Cabinet substantially controls, in ordinary circumstances, not only the general legislative programme of Parliament, but the whole course of Parliamentary proceedings. In effect, though not in form, the Cabinet, by reason of the fact that all Ministers are members of the Executive Council, is also the dominant element in the executive government of the country. Even in summoning, proroguing or dissolving Parliament, the Governor-General or Governor is usually guided by the advice tendered him by the Cabinet, through the Prime Minister or Premier, though legally the discretion is vested in the Governor-General or Governor himself.

(iii) *The Executive Council.* This body is usually presided over by the Governor-General or Governor, the members thereof holding office during his pleasure. All Ministers of State must be members of the Executive Council. In the Commonwealth, and also in the States of Victoria and Tasmania, Ministers remain members of the Executive Council on leaving office, but are not summoned to attend its meetings, for it is an essential feature of the Cabinet system that attendance should be limited to the Ministers of the day. The meetings of the Executive Council are formal and official in character, and a record of

proceedings is kept by the Secretary or Clerk. At Executive Council meetings, the decisions of the Cabinet are (where necessary) given legal form, appointments made, resignations accepted, proclamations issued, and regulations and the like approved.

(iv) *The Appointment of Ministers.* Legally, Ministers hold office during the pleasure of the Governor-General or Governor. In practice, however, the discretion of the Queen's representative in the choice of Ministers is limited by the conventions on which the Cabinet system rests. Australian practice follows, broadly, that of the United Kingdom. When a Ministry resigns, the Crown's custom is to send for the leader of the party which commands, or is likely to be able to command, a majority in the popular House, and to commission him, as Prime Minister or Premier, to "form a Ministry"—that is, to nominate other persons to be appointed as Ministers of State and to serve as his colleagues in the Cabinet.

The customary procedure in connexion with the resignation or acceptance of office by a Ministry is described fully in previous issues of the Official Year Book (*see* No. 6, p. 942). It may be added, however, that legislation now exists in all States, the effect of which is to obviate the necessity of responsible Ministers vacating their seats in Parliament on appointment to office.

(v) *Ministers in Upper and Lower Houses.* The following table shows the number of Ministers with seats in the Upper or Lower Houses of each Parliament in December, 1958 :—

AUSTRALIAN PARLIAMENTS : MINISTERS IN UPPER OR LOWER HOUSES, DECEMBER, 1958.

Ministers with Seats in—	C'wealth.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
The Upper House ..	5	2	4	(a)	3	2	..	16
The Lower House ..	17	14	10	11	5	8	9	74
<b>Total ..</b>	<b>22</b>	<b>16</b>	<b>14</b>	<b>11</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>90</b>

(a) Abolished in 1922.

For the names of the occupants of ministerial office in each of the Parliaments of Australia in December, 1958, *see* § 3. of this chapter (p. 79). Subsequent changes of importance in Ministries will be found in the Appendix to this volume.

(vi) *Numbers and Salaries of Commonwealth Ministers.* Under sections 65 and 66, respectively, of the Constitution of the Commonwealth, the number of Ministers of State was not to exceed seven, and the annual sum payable for their salaries was not to exceed £12,000, each provision to operate, however, "until the Parliament otherwise provides."

Subsequently, number and salaries were increased to 8—£13,650 (1915) and to 9—£15,300 (1917). During the period of financial emergency in the early thirties the ministerial salary appropriation was reduced to as low as £10,710 a year, and was not restored to its former level until 1938 when the appropriation was £16,950. During the period of restoration of salary the number of Ministers was increased to 10 (1935). Later increases were as follows:—to 11—£18,600 (1938); 19—£21,250 (1941)—these increases were war-time provisions, extended into peacetime in 1946; £27,650 (1947—number unaltered); 20—£29,000 (1951); £41,000 (1952—number unaltered); 22—£46,500 (1956). In 1938, an additional ministerial allowance of £1,500 a year was granted to the Prime Minister; this was increased to £3,500 a year (exempt from income tax) in 1952 and at the same time an additional ministerial allowance of £1,000 a year (exempt from income tax) was granted to each other Minister.

All amounts payable in the foregoing paragraphs are in addition to amounts payable as Parliamentary allowances (*see* paras. 5 and 6 following).

5. *Number and Salary of Members of the Legislatures, Australian Parliaments, December, 1958.*—The following table shows the number and annual salary of members in each of the legislative chambers in December, 1958.

AUSTRALIAN PARLIAMENTS : MEMBERS AND ANNUAL SALARIES,  
31st DECEMBER, 1958.

Members in—	C'wealth.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
NUMBER OF MEMBERS.								
Upper House ..	60	60	34	(a)	20	30	19	223
Lower House ..	124	94	66	75	39	50	30	478
<b>Total ..</b>	<b>184</b>	<b>154</b>	<b>100</b>	<b>75</b>	<b>59</b>	<b>80</b>	<b>49</b>	<b>701</b>

ANNUAL SALARY.  
(£.)

Upper House ..	(b) 2,350	(c) 500	(d) 1,600	(a)	(e) 1,900	(f) 2,160	(g) 1,000	..
Lower House ..	(b) 2,350	1,975	(d) 1,600	h£2,501 10s.	(e) 1,900	(f) 2,160	(g) 1,000	..

(a) Abolished in 1922. (b) Plus expense allowances—Senators, £700; Members of the House of Representatives, city electorates, £600, country electorates, £800. See also para. 6 following. (c) Plus allowance varying from £500 to £800 according to remoteness of electorate. (d) Plus allowance of £400 for metropolitan, £600 for urban, £700 for inner country and £800 for outer country electorates. (e) Plus allowance according to distance of electorate from Adelaide; £300 if more than 50 miles, £325 if more than 200 miles. (f) Plus an adjustment in accordance with variations of the State basic wage which at 31st December, 1956 was £40. Plus £50 where any part of electorate is more than 50 miles from Perth. (g) Plus cost of living adjustment, pegged at £382. Plus allowance according to area of electorate and distance from the capital varying from £250 to £550 in the case of the Legislative Council, and from £500 to £800 in the case of the House of Assembly. (h) Plus marginal allowances of £65 to £200 for metropolitan and near metropolitan electorates and ranging from £175 to £400 for other non-metropolitan electorates.

6. Commonwealth Parliamentary Allowances. Section 48 of the Commonwealth Constitution granted to each senator and member of the House of Representatives an allowance of £400 a year until Parliament should decide to alter it. This general allowance has been altered on several occasions (see Official Year Book No. 42, pp. 69 and 70) and in 1956 was raised to £2,350 a year. Certain additional allowances are also provided for holders of Parliamentary Offices, etc., details of which are also given in the issue referred to above.

7. Enactments of the Parliament.—In the Commonwealth, all laws are enacted in the name of the Sovereign, the Senate, and the House of Representatives. The subjects with respect to which the Commonwealth Parliament is empowered to make laws are enumerated in the Constitution. In the States, other than South Australia and Tasmania, laws are enacted in the name of the Sovereign by and with the consent of the Legislative Council (except in Queensland) and Legislative Assembly. In South Australia and Tasmania, laws are expressed to be enacted in the name of the Governor of the State, with the advice and consent of the Parliament in the case of South Australia, and of the Legislative Council and House of Assembly in the case of Tasmania. The Governor-General or the State Governor acts on behalf of, and in the name of, the Sovereign, in assenting to Bills passed by the Legislatures, but he may reserve them for the special consideration of the Sovereign. The Parliaments of the States are empowered generally, subject to the Commonwealth Constitution, to make laws in and for their respective States, in all cases whatsoever. Subject to certain limitations, they may alter, repeal, or vary their Constitutions. Where a law of a State is inconsistent with a law of the Commonwealth, the latter prevails, and the former is, to the extent of the inconsistency, invalid.

§ 2. Parliaments and Elections.

1. Commonwealth.—(i) Qualifications for Membership and for Franchise—Commonwealth Parliament. Qualifications necessary for membership of either House of the Commonwealth Parliament are possessed by any British subject, twenty-one years of age

or over, who has resided in the Commonwealth for at least three years and who is, or is qualified to become, an elector of the Commonwealth. Qualifications for Commonwealth franchise are possessed by any British subject, not under twenty-one years of age and not disentitled on racial or other grounds, who has lived in Australia for six months continuously. Residence in a sub-division for a period of one month prior to enrolment is necessary to enable a qualified person to enrol. Enrolment and voting are compulsory. A member of the Defence Forces on service outside Australia who is a British subject not less than 21 years of age and has lived in Australia for six months continuously is entitled to vote at Commonwealth elections whether enrolled or not.

The principal reasons for disqualification of persons otherwise eligible as members of either Commonwealth House are :—Membership of the other House, allegiance to a foreign power, being attainted of treason, being convicted and under sentence for any offence punishable by imprisonment for one year or longer, being an undischarged bankrupt or insolvent, holding office of profit under the Crown (with certain exceptions), or having pecuniary interest in any agreement with the public service of the Commonwealth except as a member of an incorporated company of more than 25 persons. Persons of unsound mind, attainted of treason, convicted and under sentence for any offence punishable by imprisonment for one year or longer, or of certain non-European races are excluded from the franchise. In the main, these or similar grounds for disqualification apply also to State Parliament membership and franchise.

(ii) *Commonwealth Parliaments and Elections.* From the establishment of the Commonwealth until 1949, the Senate consisted of 36 members, six being returned by each of the original federating States. The Constitution empowers Parliament to increase or decrease the size of the Parliament and, as the population of the Commonwealth had more than doubled since its inception, the Parliament enacted legislation in 1948 enlarging both Houses of Parliament and providing a representation ratio nearer to the proportion which existed at Federation. Thus, the Representation Act 1948 provided that there shall be ten Senators from each State instead of six, increasing the total to 60 Senators. To effect this transition in the Senate, seven Senators were elected from each State at the elections of 1949, four taking office immediately the Senate sat after the election, the remaining three commencing their term on the usual date—1st July, 1950. Members of this Chamber are normally elected for a term of six years, but half the members retire at the end of every third year, and they are eligible for re-election. Accordingly, at each normal election of Senators, five Senators are now elected in each State, making 30 to be elected at each such election.

In accordance with the constitution, the total number of members of the House of Representatives must be as nearly as practicable double that of the Senate. Consequently, in terms of the Constitution and the Representation Act 1905–1938, from the date of the 1949 elections the number of members in the House of Representatives was increased from 74 to 121 (excluding the members for the internal Territories). As the States are represented in the House of Representatives on a population basis, the numbers were increased as follows:—New South Wales—from 28 to 47; Victoria—from 20 to 33; Queensland—from 10 to 18; South Australia—from 6 to 10; and Western Australia—from 5 to 8. Tasmania's representation remained at 5 and the total was increased from 74 to 121. The increase in the number of members of Parliament necessitated a redistribution of seats and a redetermination of electoral boundaries. This was carried out by Distribution Commissioners in each State on a quota basis, but taking into account community or diversity of interest, means of communication, physical features, existing boundaries of divisions and sub-divisions, and State electoral boundaries.

The population as disclosed by the Census taken on 30th June, 1954, necessitated a further alteration in representation in the House of Representatives in respect of New South Wales, South Australia, and Western Australia. Representation as from the General Election for the House of Representatives on 12th December, 1955, is New South Wales 46, Victoria 33, Queensland 18, South Australia 11, Western Australia 9, Tasmania 5, the total number of members (excluding the members for the internal Territories) being increased from 121 to 122. A redistribution of electoral boundaries was effected by Distribution Commissioners appointed in each State.

Since the general elections of 1922, the Northern Territory has been represented by one member in the House of Representatives. The Australian Capital Territory Representation Act 1948 gave similar representation to the Australian Capital Territory as from the elections of 1949. The members for the Territories may join in the debates but are

not entitled to vote, except on a motion for the disallowance of any ordinance of the Territory or on any amendment to such motion. The Commonwealth Parliament, however, when providing for a Legislative Council for the Northern Territory in 1947, relinquished the power to disallow ordinances for that Territory.

The Constitution provides for a minimum of five members for each original State. Members of the House of Representatives are elected for the duration of the Parliament, which is limited to three years. At elections for Senators, the whole State constitutes the electorate. For the purposes of elections for the House of Representatives, the State is divided into single electorates corresponding in number with the number of members to which the State is entitled. Further information regarding the Senate and the House of Representatives is given in earlier issues of the Official Year Book.

There have been twenty-two complete Parliaments since Federation. Until 1927, the Parliament met in Melbourne; it now meets in Canberra, the first meeting at Parliament House, Canberra, being opened by the late King George VI., then Duke of York, on 9th May, 1927.

The fifth Parliament, which was opened on 9th July, 1913, was dissolved on 30th July, 1914 in somewhat unusual circumstances, when for the first time in the history of the Commonwealth, a deadlock occurred between the Senate and the House of Representatives, and, in accordance with section 57 of the Constitution which provides for such an eventuality, both Houses were dissolved by the Governor-General. The nineteenth Parliament was similarly dissolved. It opened on 22nd February, 1950, but on 19th March, 1951, in its first session, a double dissolution was proclaimed for the second time since the inception of the Commonwealth.

The system of voting for the House of Representatives is preferential and for the Senate, until 1948, voting was also preferential. The Commonwealth Electoral Act 1948, however, introduced with the Representation Act 1948 to enlarge the Commonwealth Parliament (*see p. 72*), changed the system of scrutiny and counting of votes in Senate elections from preferential to that of proportional representation. For a description of the system, *see Official Year Book No. 38, pages 82-3.*

For particulars of electors enrolled and of electors who voted at the various Commonwealth elections, *see earlier Year Books.* Elections for the Senate have usually been held at the same time as those for the House of Representatives. The double dissolution of the nineteenth Parliament, however, referred to above, led to the holding of Senate elections on separate dates. An election for the Senate was held on 9th May, 1953, and a further election was due within one year of 30th June, 1956, i.e. the date of the completion of the term of office of half the elected Senators. The twenty-first Parliament which opened on 4th August, 1954, was dissolved on 4th November, 1955, which enabled the election for the Senate and the House of Representatives to be held simultaneously.

Following the House of Representatives election on 10th December, 1955, the twenty-second Parliament opened on 15th February, 1956 and was dissolved on 14th October, 1958. The elections for both Houses were held on 22nd November, 1958, and particulars of electors and voting in the several States are as follows:—

SENATE ELECTION, 22nd NOVEMBER, 1958.

State.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	1,005,431	1,058,873	2,064,304	961,725	1,003,397	1,965,122	95.65	94.76	95.20
Victoria ..	731,950	772,960	1,504,910	704,332	736,171	1,440,503	96.23	95.24	95.72
Queensland ..	393,437	390,917	784,354	373,067	371,876	744,943	94.82	95.13	94.98
South Australia	239,579	251,351	490,930	232,673	241,159	473,832	97.12	95.95	96.52
West. Australia	180,508	180,901	361,409	171,630	173,168	344,798	95.08	95.73	95.40
Tasmania ..	88,197	90,520	178,717	85,552	86,359	171,911	97.00	95.40	96.19
<b>Total ..</b>	<b>2,639,102</b>	<b>2,745,522</b>	<b>5,384,624</b>	<b>2,528,979</b>	<b>2,612,130</b>	<b>5,141,109</b>	<b>95.83</b>	<b>95.14</b>	<b>95.48</b>

## ELECTION FOR HOUSE OF REPRESENTATIVES, 10th DECEMBER, 1955.

State.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	1,005,431	1,058,873	2,064,304	961,725	1,003,397	1,965,122	95.65	94.76	95.20
Victoria ..	731,950	772,960	1,504,910	704,332	736,171	1,440,503	96.23	95.24	95.72
Queensland ..	393,437	390,917	784,354	373,067	371,876	744,943	94.82	95.13	94.98
South Australia ..	239,579	251,351	490,930	232,673	241,159	473,832	97.12	95.95	96.52
West. Australia	180,508	180,901	361,409	171,630	173,168	344,798	95.08	95.73	95.40
Tasmania ..	88,197	90,520	178,717	85,552	86,359	171,911	97.00	95.40	96.19
Nor. Territory	4,498	3,180	7,678	3,330	2,513	5,843	74.03	79.03	76.10
Aust. Cap. Terr.	10,593	9,970	20,563	9,786	9,362	19,148	92.38	93.90	93.12
<b>Australia ..</b>	<b>2,654,193</b>	<b>2,758,672</b>	<b>5,412,865</b>	<b>2,542,095</b>	<b>2,624,005</b>	<b>5,166,100</b>	<b>95.78</b>	<b>95.12</b>	<b>95.44</b>

The twenty-third Parliament opened on 17th February, 1959.

(iii) *Commonwealth Referenda.* According to Section 128 of the Constitution, any proposed law for the alteration of the Constitution in addition to being passed by an absolute majority of each House of Parliament, must be submitted to a referendum of the electors in each State, and also must be approved by a majority of the States and of the electors who voted, before it can be presented for Royal Assent. So far, 24 proposals have been submitted to referenda and the consent of the electors has been received in four cases only, the first in relation to the election of Senators in 1906, the second and third in respect of State Debts—one in 1910 and the other in 1928—and the fourth in respect of Social Services in 1946. Details of the various referenda and the voting thereon were given in previous issues of the Official Year Book (see No. 18, p. 87, No. 31, p. 67, No. 35, p. 60, No. 36, p. 61, No. 37, pp. 64-5, No. 38, p. 84 and No. 40, p. 56), and a brief résumé was given in Official Year Book No. 41 (see p. 67).

2. State Elections.—(i) *Latest in each State.* (a) *Upper Houses.* The following table shows particulars of the voting at the most recent elections for the Upper Houses or Legislative Councils in the States of Victoria, South Australia and Western Australia. In New South Wales, members of the Legislative Council are elected at simultaneous sittings of the members of both Houses, in Queensland there has been no Legislative Council since 1922, and in Tasmania three members of the Council are elected annually (but four in each sixth year) and the Council cannot be dissolved as a whole.

## STATE UPPER HOUSE ELECTIONS.

State.	Year of Latest Election.	Electors Enrolled—Whole State.			Contested Electorates.					
		Males.	Fe-males.	Total.	Electors who Voted.			Percentage of Electors who Voted.		
					Males.	Fe-males.	Total.	Males.	Fe-males.	Total.
Victoria ..	1958	722,231	766,062	1,488,293	625,020	658,645	1,283,665	93.25	91.89	92.54
South Australia ..	1956	(a)	(a)	174,241	(a)	(a)	16,002	(a)	(a)	69.69
Western Australia	1956	70,958	29,815	100,773	35,372	15,563	50,935	74.23	71.32	73.31

(a) Not available.

Particulars of voting in 1958 at the latest contested election for the Legislative Council in Tasmania are as follows:—Number of electors on the roll, 13,773; number of votes recorded, 11,778; percentage of electors who voted, 85.52.

(b) *Lower Houses.* The following table shows particulars of the voting at the most recent election for the Lower House in each State.

STATE LOWER HOUSE ELECTIONS.

State.	Year of Latest Election.	Electors Enrolled— Whole State.			Contested Electorates.					
					Electors who Voted.			Percentage of Electors who Voted.		
		Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.
New South Wales	1956	979,706	1,031,552	2,011,258	843,786	878,842	1,722,628	93.81	92.64	93.21
Victoria ..	1958	717,192	760,873	1,478,065	679,807	713,006	1,392,813	94.79	93.71	94.23
Queensland ..	1957	396,804	394,915	791,719	355,395	351,512	706,907	94.92	94.23	94.58
South Australia ..	1956	(a)	(a)	468,303	(a)	(a)	280,811	(a)	(a)	93.90
Western Australia	1956	171,234	170,784	342,018	118,511	123,352	241,863	91.95	92.40	92.18
Tasmania ..	1956	86,690	87,940	174,630	82,806	83,487	166,293	95.52	94.94	95.23

(a) Not available.

(ii) *Elections in Earlier Years.* Official Year Book No. 38 and earlier issues contain particulars of the voting at elections for both Upper and Lower State Houses in years prior to those shown above, and some general information is given in the following paragraphs.

3. *The Parliament of New South Wales.*—The Parliament of New South Wales consists of two Chambers, the Legislative Assembly and the Legislative Council. By legislation assented to in July, 1949, the Assembly was enlarged from 90 to 94 members, elected in single-seat electoral districts, who hold their seats during the existence of the Parliament to which they are elected. The duration of Parliament is limited to three years and by legislation enacted in 1950 cannot be extended beyond that period except with the approval of electors by referendum. Until 1934, the Council was a nominee Chamber, consisting of a variable number of members appointed for life without remuneration, but as from 23rd April, 1934, it was reconstituted and became a House of 60 members to serve without remuneration for a term of twelve years, with one-quarter of the members retiring every third year. As from 1st September, 1948, however, members of the Council have been paid an allowance, now £500 a year. Vacancies are filled by members of both Chambers, who vote as a single electoral body at simultaneous sittings of both Chambers.

Any person who is an elector entitled to vote at a Legislative Assembly election, or a person entitled to become such elector, and who has been for at least three years resident in Australia, and who is a natural-born or naturalized subject of the Queen, is eligible for election to the Legislative Council. For the Council franchise, an elector must be a sitting member of either the Legislative Council or the Legislative Assembly. Any person qualified to vote at a Legislative Assembly election for any electoral district in New South Wales is qualified to be elected as a Member for that or any other district. Any person not under twenty-one years of age, who is a natural born or naturalized subject of the Queen, and who has lived in Australia for at least six months continuously, and in New South Wales for at least three months, and in any sub-division for at least one month immediately preceding the date of claim for enrolment, is entitled to enrolment as an elector for the Legislative Assembly. Persons are disqualified either as members or voters for reasons generally the same as those outlined on page 72.

Since the introduction of responsible government in New South Wales there have been 37 complete Parliaments, the first of which opened on 22nd May, 1856, and was dissolved on 19th December, 1857, while the thirty-seventh was dissolved on 6th February, 1956. The thirty-eighth Parliament opened on 10th April, 1956.

The elections of 1920, 1922, and 1925 were contested on the principle of proportional representation, but a reversion to the system of single seats and preferential voting was made at all later appeals to the people. The principle of one elector one vote was adopted in 1894, and that of compulsory enrolment in 1921. Compulsory voting was introduced at the 1930 election. The franchise was extended to women (Women's Franchise Act) in 1902, and was exercised by them for the first time in 1904.

4. *The Parliament of Victoria.*—Both of the Victorian legislative Chambers are elective bodies, but there is a considerable difference in the number of members of each House, and there was also, until the Legislative Council Reform Act 1950, a difference in the qualifications

necessary for members and electors. The number of members in the Upper House is 34, two members being returned for each of the seventeen provinces, and in the Lower House, 66, one member being returned for each electorate. In the Legislative Council, the tenure of the seat is for six years, except that one-half of the members who are elected for provinces at any general election for the Council are entitled to hold their seats for a period of only three years, one member for each of the seventeen provinces retiring every third year. Members of the Legislative Assembly are elected for the duration of Parliament, which is limited to three years.

Prior to the passing of the Act referred to above, which operated from November, 1951, property qualifications were required for membership of, and franchise for, the Legislative Council. As alternatives to the property qualifications for the Council franchise, certain professional and academic qualifications were also allowed. As amended, however, the qualifications for membership of the Council are possessed by any adult natural-born subject of the Queen, or by any adult alien naturalized for five years and resident in Victoria for two years. Entitlement for enrolment as an elector is extended to every adult natural-born or naturalized subject who has resided in Australia for at least six months continuously and in Victoria for at least three months and in any subdivision for at least one month immediately preceding the date of claim for enrolment. These qualifications for membership and electors apply also in respect of the Legislative Assembly. Reasons for disqualification follow the general pattern for Australia (*see p. 72*).

Since the introduction of responsible government in Victoria, there have been 40 complete Parliaments, the first of which opened on 21st November, 1856, and closed on 9th August, 1859, while the fortieth was dissolved on 18th April, 1958. The forty-first Parliament was opened on 8th July, 1958.

Single voting is observed in elections held for either House, plural voting having been abolished for the Legislative Assembly in 1899 and for the Legislative Council in 1937. A preferential system of voting (*see Official Year Book No. 6, p. 1182*) was adopted for the first time in Victoria at the Assembly election held in November, 1911. The franchise was extended to women by the Adult Suffrage Act 1908, while voting at elections was made compulsory for the Legislative Assembly in 1926 and for the Legislative Council in 1935.

**5. The Parliament of Queensland.**—As stated previously, the Legislative Council in Queensland was abolished in 1922, the date of Royal Assent to the Act being 23rd March, 1922. The Legislative Assembly is composed of 75 members, each elected for a period of three years and each representing an electoral district.

Any person qualified to be enrolled for any electoral district is qualified for election to the Legislative Assembly. Any person of the age of twenty-one years, who is a natural-born or naturalized British subject with continuous residence within Australia for six months, in Queensland for three months, and in an electoral district for one month prior to making a claim for enrolment, is qualified to enrol as an elector. The classes of persons not qualified to be elected are similar to those for other Australian Parliaments (*see p. 72*).

Under the Electoral Districts Act of 1949, the number of members and the number of electorates were increased from 62 to 75, and the increase became effective from the beginning of the thirty-second Parliament, elected in 1950. The Act divided the State into four zones, and a commission of three appointed by the Governor-in-Council completely distributed the prescribed zones into the number of electoral districts on a quota basis taking into account community or diversity of interest, means of communication, physical features, boundaries of Petty Sessions Districts and of areas of Local Authorities.

Since the establishment of responsible government in Queensland, there have been 34 complete Parliaments, the last of which was dissolved on 13th June, 1957. Opinions differ regarding the opening date of the first Queensland Parliament. According to the Votes and Proceedings of the Legislative Assembly, the House met for the first time on 22nd May, 1860, when the members were sworn and the Speaker elected. The Governor, however, was unable to be present on that date, but he duly attended on 29th May, 1860, and delivered the Opening Address. The thirty-fifth Parliament was opened on 27th August, 1957.

At the elections held in May, 1915, the principle of compulsory voting was introduced for the first time in Australia. The election of 1907 was the first State election in Queensland at which women voted, the right being conferred under the Elections Acts Amendment Act 1905. In 1942, the system of preferential voting was abolished and that of election of the candidate obtaining the highest number of votes in the electorate now operates.

**6. The Parliament of South Australia.**—In this State, there is a Legislative Council composed of twenty members and a House of Assembly with 39 members, both Chambers being elective. For the Legislative Council, the State is divided into five districts each returning four members, two of whom retire alternately, the term of office being six years. Thirty-nine districts return one member each to the House of Assembly; prior to 1938 there were 46 members representing nineteen districts. The term of office for the House of Assembly is three years.

Any person who is at least thirty years of age, is a British subject or legally made a denizen of the State and who has resided in the State for at least three years is qualified for membership in the Legislative Council. Qualifications for the Council franchise are that a person is at least twenty-one years of age, a British subject, an inhabitant of the State with residence for at least six months prior to the registration of the electoral claim, and that he or she has had certain war service, or possesses property qualifications relating to ownership, leaseholding, or inhabitant occupancy. Any person qualified and entitled to be registered as an elector for the House of Assembly is qualified and entitled for election as a member of that House. Qualifications for enrolment as an elector for the House of Assembly are that a person is at least twenty-one years of age, is a British subject, and has lived continuously in Australia for at least six months, in the State for three months and in an Assembly subdivision for one month immediately preceding the date of claim for enrolment. Provisions in the Constitution for disqualification from membership or from the franchise in respect of either House follow the usual pattern for Australia (*see p. 72*).

Since the inauguration of responsible government in South Australia, there have been 34 complete Parliaments, the first of which was opened on 22nd April, 1857. The thirty-fourth Parliament closed on 29th February, 1956 and the thirty-fifth was opened on 22nd May, 1956. The duration of the twenty-eighth Parliament was extended from three to five years by the provisions of the Constitution (Quinquennial Parliament) Act 1933, but this Act was repealed by the Constitution Act Amendment Act (No. 2) 1939, and the three-year term was reverted to.

South Australia was the first of the States to grant women's suffrage (under the Constitution Amendment Act 1894), the franchise being exercised by women for the first time at the Legislative Assembly election on 25th April, 1896. Compulsory voting for the House of Assembly was first observed at the 1944 election. A system of preferential voting is in operation.

**7. The Parliament of Western Australia.**—In this State, both Chambers are elective. For the Legislative Council, there are 30 members, each of the ten provinces returning three members, one of whom retires biennially. At each biennial election, the member elected holds office for a term of six years, and automatically retires at the end of that period. The Legislative Assembly is composed of 50 members, one member being returned by each electoral district. Members of the Legislative Assembly are elected for three years.

Qualifications required for membership of the Legislative Council are the age of thirty years, residence in Western Australia for two years and being a natural-born British subject or naturalized for five years prior to election and resident in the State for that period. Qualifications required for Council franchise are the age of twenty-one years, residence in Western Australia for six months, being a natural-born British subject or naturalized for twelve months and certain property qualifications relating to freehold, leasehold, or householder occupancy. Qualifications required for membership of the Legislative Assembly are the age of twenty-one years, residence in Western Australia for twelve months and being a natural-born British subject or naturalized for five years and resident in the State for two years prior to election. Qualifications required for the franchise are the age of twenty-one years, residence in Western Australia for six months and in an electoral district continuously for three months, and being a natural-born or naturalized British subject. Persons may be disqualified as members or voters for reasons similar to those for other Australian Parliaments (*see p. 72*).

Since the establishment of responsible government in Western Australia, there have been twenty-one complete Parliaments, the first of which was opened on 30th December, 1890. The twenty-first Parliament closed on 6th April, 1956, and the twenty-second was opened on 2nd August, 1956. A preferential system of voting is in use in Western Australia.

Women's suffrage was granted by the Electoral Act of 1899. The first woman member to be elected to an Australian Parliament was returned at the 1921 election in this State. Voting for the Legislative Assembly was made compulsory in December, 1936, the first elections for which the provision was in force being those held on 18th March, 1939.

**8. The Parliament of Tasmania.**—In Tasmania there are two legislative Chambers, the Legislative Council and the House of Assembly, both bodies being elective. In accordance with the Constitution Act 1946, the Council now consists of nineteen members, elected for six years and returned from nineteen divisions. Three members retire annually (except in the 1953 elections and in each sixth successive year thereafter, when four retire) and the Council cannot be dissolved as a whole. There are five House of Assembly divisions, corresponding to the Commonwealth electoral divisions, each returning six members elected under a system of proportional representation which first came into force at the 1909 elections. By the Constitution Act 1936, the life of the Assembly was extended from three to five years except where, after a general election, all the Members elected are members of either of two opposing parties, and, of these, fifteen are members of one of those parties and fifteen are members of the other, when the Governor shall by Proclamation, invoke the Constitution Act (No. 2) 1954 which limits the life of the Assembly to three years.

Persons qualified for election to the Legislative Council must be 25 years of age and qualified to vote as Council electors, have been resident in Tasmania for a period of five years at any one time or at least two years immediately preceding the election, and be natural-born subjects of the Queen or naturalized for at least five years. An elector for the Council must be twenty-one years of age, a natural-born or naturalized subject and resident in Tasmania for a period of twelve months, with certain freehold or occupancy property qualifications, or the spouse of a person qualified to vote as the owner or occupier of property, or with certain academic, professional, defence force, or war service qualifications. For the House of Assembly, members must be twenty-one years of age, have been resident in Tasmania for a period of five years at any one time or for a period of two years immediately preceding the election, and be natural-born subjects of the Queen or naturalized for a period of five years. Electors must be twenty-one years of age, natural-born or naturalized subjects and resident in Tasmania for a period of six months continuously. Reasons for disqualification of members or voters are similar to those for other Australian Parliaments (*see* p. 72).

The first Tasmanian Parliament opened on 2nd December, 1856, and closed on 8th May, 1861. There have been 31 complete Parliaments since the inauguration of responsible government, the thirty-first having been dissolved on 20th September, 1956. The thirty-second Parliament was opened on 4th December, 1956.

The suffrage was granted to women under the Constitution Amendment Act 1903 and compulsory voting for both Houses came into force on the passing of the Electoral Act in 1928. The system of voting is proportional representation by single transferable vote.

**9. Superannuation Funds of the Parliament of the Commonwealth and of the Australian States.**—(i) *General.* In Official Year Book No. 38, there is a conspectus of Superannuation Funds of the Parliaments of the Commonwealth and of the five States (New South Wales, Victoria, Queensland, South Australia and Western Australia) in which such schemes operate (*see* pp. 91-9). This conspectus summarized the main features of each fund as at 30th June, 1949. Although the schemes are still essentially as described in the conspectus, there have subsequently been several amending Acts providing for extensions or increases in benefits, increased contributions, etc., in some of the schemes. In December, 1955, the Tasmanian Parliament passed an Act, the Parliamentary Retiring Allowances Act, No. 59 of 1955, details of which may be found in earlier issues of the Year Book (*see* No. 44, p. 72). The Commonwealth Retiring Allowances Act 1952 provided *inter alia* for additional benefit of £1,200 a year, subject to certain conditions, to a retired Prime Minister, and in case of his death, additional benefit of £750 a year to his widow.

(ii) *Finances.* For particulars of the financial operations of these schemes *see* Chapter XX.—Private Finance.

## § 3. Administration and Legislation.

1. **The Commonwealth Parliaments.**—The first Parliament of the Commonwealth was convened by proclamation dated 29th April, 1901, by His Excellency the Marquis of Linlithgow, then Earl of Hopetoun, Governor-General. It was opened on 9th May, 1901, by H.R.H. the Duke of Cornwall and York, who had been sent to Australia for that purpose by His Majesty the King. The Rt. Hon. Sir Edmund Barton, G.C.M.G., K.C., was Prime Minister.

The following table shows the number and duration of Parliaments since Federation :—

## COMMONWEALTH PARLIAMENTS.

Number of Parliament.	Date of Opening.	Date of Dissolution.
First .. .. .	9th May, 1901 .. ..	23rd November, 1903
Second .. .. .	2nd March, 1904 .. ..	5th November, 1906
Third .. .. .	20th February, 1907 .. ..	19th February, 1910
Fourth .. .. .	1st July, 1910 .. ..	23rd April, 1913
Fifth .. .. .	9th July, 1913 .. ..	30th July, 1914(a)
Sixth .. .. .	8th October, 1914 .. ..	26th March, 1917
Seventh .. .. .	14th June, 1917 .. ..	3rd November, 1919
Eighth .. .. .	26th February, 1920 .. ..	6th November, 1922
Ninth .. .. .	28th February, 1923 .. ..	3rd October, 1925
Tenth .. .. .	13th January, 1926 .. ..	9th October, 1928
Eleventh .. .. .	9th February, 1929 .. ..	16th September, 1929
Twelfth .. .. .	20th November, 1929 .. ..	27th November, 1931
Thirteenth .. .. .	17th February, 1932 .. ..	7th August, 1934
Fourteenth .. .. .	23rd October, 1934 .. ..	21st September, 1937
Fifteenth .. .. .	30th November, 1937 .. ..	27th August, 1940
Sixteenth .. .. .	20th November, 1940 .. ..	7th July, 1943
Seventeenth .. .. .	23rd September, 1943 .. ..	16th August, 1946
Eighteenth .. .. .	6th November, 1946 .. ..	31st October, 1949
Nineteenth .. .. .	22nd February, 1950 .. ..	19th March, 1951(a)
Twentieth .. .. .	12th June, 1951 .. ..	21st April, 1954
Twenty-first .. .. .	4th August, 1954 .. ..	4th November, 1955
Twenty-second .. .. .	15th February, 1956 .. ..	14th October, 1958
Twenty-third .. .. .	17th February, 1959 .. ..	

(a) A dissolution of both the Senate and the House of Representatives was granted by the Governor-General, acting on the advice of the Ministry, and under section 57 of the Constitution.

2. **Governors-General and Commonwealth Ministries.**—(i) *Governors-General.* The following statement shows the names of the Governors-General since the inception of the Commonwealth :—

## GOVERNORS-GENERAL.

- Rt. Hon. JOHN ADRIAN LOUIS, EARL OF HOPETOUN (afterwards MARQUIS OF LINLITHGOW) P.C., K.T., G.C.M.G., G.C.V.O. From 1st January, 1901 to 9th January, 1903.
- Rt. Hon. HALLAM, BARON TENNYSON, P.C., G.C.M.G. From 17th July, 1902 to 9th January, 1903, (Acting).
- Rt. Hon. HALLAM, BARON TENNYSON, P.C., G.C.M.G. From 9th January, 1903 to 21st January, 1904.
- Rt. Hon. HENRY STAFFORD, BARON NORTHCOLE, P.C., G.C.M.G., G.C.I.E., C.B. From 21st January, 1904 to 9th September, 1908.
- Rt. Hon. WILLIAM HUMBLE, EARL OF DUDLEY, P.C., G.C.B., G.C.M.B., G.C.V.O. From 9th September, 1908, to 31st July, 1911.
- Rt. Hon. THOMAS, BARON DENMAN, P.C., G.C.M.G., K.C.V.O. From 31st July, 1911 to 18th May, 1914.
- Rt. Hon. SIR RONALD CRAUFURD MUNRO FERGUSON (afterwards VISCOUNT NOVAR OF RAITH), G.C.M.G. From 18th May, 1914 to 6th October, 1920.
- Rt. Hon. HENRY WILLIAM, BARON FORSTER OF LEPE, P.C., G.C.M.G., From 6th October, 1920 to 8th October, 1925.
- Rt. Hon. JOHN LAWRENCE, BARON STONEHAVEN, P.C., G.C.M.G., D.S.O. From 8th October, 1925 to 22nd January, 1931.
- Rt. Hon. SIR ISAAC ALFRED ISAACS, G.C.B., G.C.M.G. From 22nd January, 1931 to 23rd January, 1936.
- General the Rt. Hon. ALEXANDER GORE ARKWRIGHT, BARON GOWRIE, V.C., P.C., G.C.M.G., C.B., D.S.O., K.G.St.J. From 23rd January, 1936 to 30th January, 1945.

His Royal Highness PRINCE HENRY WILLIAM FREDERICK ALBERT, DUKE OF GLOUCESTER, EARL OF ULSTER AND BARON CULLODEN, K.G., K.T., K.P., P.C., G.C.B., G.C.M.G., G.C.V.O., General in the Army, Air Chief Marshal in the Royal Air Force, One of His Majesty's Personal Aides-de-Camp. From 30th January, 1945 to 11th March, 1947.  
 Rt. Hon. SIR WILLIAM JOHN MCKELL, G.C.M.G. From 11th March, 1947 to 8th May, 1953.  
 Field-Marshal SIR WILLIAM JOSEPH SLIM, G.C.B., G.C.M.G., G.C.V.O., G.B.E., D.S.O., M.C., K.St.J. From 8th May, 1953.

(ii) *Administrators.* In addition to the holders of the office of Governor-General listed above, certain persons have, from time to time, been appointed as Administrator of the Government of the Commonwealth during the absence from Australia or illness of the Governor-General. The following is a list of such appointments.

	Term of Office.
Rt. Hon. Frederic John Napier, Baron Chelmsford, K.C.M.G.	21st December, 1909 to 27th January, 1910
Lieut-Colonel the Rt. Hon. Arthur Herbert Tennyson, Baron Somers, K.C.M.G., D.S.O., M.C.	3rd October, 1930 to 22nd January, 1931
Captain the Rt. Hon. William Charles Arcedekne Vanneck, Baron Huntingfield, K.C.M.G., K.St.J.	29th March, 1938 to 24th September, 1938
Major-General Sir Winston Joseph Dugan, G.C.M.G., C.B., D.S.O.	5th September, 1944 to 30th January, 1945
Major-General Sir Winston Joseph Dugan, G.C.M.G., C.B., D.S.O.	18th January, 1947 to 11th March, 1947
General* Sir John Northcott, K.C.M.G., C.B., M.V.O.†	19th July, 1951 to 14th December, 1951
General* Sir John Northcott, K.C.M.G., K.C.V.O., C.B.	30th July, 1956 to 22nd October, 1956
General Sir Reginald Alexander Dallas Brooks, K.C.B., K.C.M.G., K.C.V.O., D.S.O., K.St.J.	8th January, 1959 to 15th January, 1959

(iii) *Commonwealth Ministries.* (a) *Names and Tenure of Office, 1901 to 1958.* The following list shows the name of each Commonwealth Ministry to hold office since 1st January, 1901, and the limits of its term of office.

#### COMMONWEALTH MINISTRIES.

- (i) BARTON MINISTRY, 1st January, 1901 to 24th September, 1903.
- (ii) DEAKIN MINISTRY, 24th September, 1903 to 27th April, 1904.
- (iii) WATSON MINISTRY, 27th April, 1904 to 17th August, 1904.
- (iv) REID-MCLEAN MINISTRY, 18th August, 1904 to 5th July, 1905.
- (v) DEAKIN MINISTRY, 5th July, 1905 to 13th November, 1908.
- (vi) FISHER MINISTRY, 13th November, 1908 to 1st June, 1909.
- (vii) DEAKIN MINISTRY, 2nd June, 1909 to 29th April, 1910.
- (viii) FISHER MINISTRY, 29th April, 1910 to 24th June, 1913.
- (ix) COOK MINISTRY, 24th June, 1913 to 17th September, 1914.
- (x) FISHER MINISTRY, 17th September, 1914 to 27th October, 1915.
- (xi) HUGHES MINISTRY, 27th October, 1915 to 14th November, 1916.
- (xii) HUGHES MINISTRY, 14th November, 1916 to 17th February, 1917.
- (xiii) HUGHES MINISTRY, 17th February, 1917 to 10th January, 1918.
- (xiv) HUGHES MINISTRY, 10th January, 1918 to 9th February, 1923.
- (xv) BRUCE-PAGE MINISTRY, 9th February, 1923 to 22nd October, 1929.
- (xvi) SCULLIN MINISTRY, 22nd October, 1929 to 6th January, 1932.
- (xvii) LYONS MINISTRY, 6th January, 1932 to 7th November, 1938.
- (xviii) LYONS MINISTRY, 7th November, 1938 to 7th April, 1939.
- (xix) PAGE MINISTRY, 7th April, 1939 to 26th April, 1939.
- (xx) MENZIES MINISTRY, 26th April, 1939 to 14th March, 1940.
- (xxi) MENZIES MINISTRY, 14th March, 1940 to 28th October, 1940.
- (xxii) MENZIES MINISTRY, 28th October, 1940 to 29th August, 1941.
- (xxiii) FADDEN MINISTRY, 29th August, 1941 to 7th October, 1941.

\* Lieutenant-General Sir John Northcott was granted honorary rank of General whilst administering the Government of the Commonwealth. † K.C.V.O., 1954.

COMMONWEALTH MINISTRIES—*continued.*

- (xxiv) CURTIN MINISTRY, 7th October, 1941 to 21st September, 1943.  
 (xxv) CURTIN MINISTRY, 21st September, 1943 to 6th July, 1945.  
 (xxvi) FORDE MINISTRY, 6th July, 1945 to 13th July, 1945.  
 (xxvii) CHIFLEY MINISTRY, 13th July, 1945 to 1st November, 1946.  
 (xxviii) CHIFLEY MINISTRY, 1st November, 1946 to 19th December, 1949.  
 (xxix) MENZIES MINISTRY, 19th December, 1949 to 11th May, 1951.  
 (xxx) MENZIES MINISTRY, 11th May, 1951 to 11th January, 1956.  
 (xxxi) MENZIES MINISTRY, 11th January, 1956 to 10th December, 1958.  
 (xxxii) MENZIES MINISTRY, 10th December, 1958.

(b) *Names of Successive Holders of Ministerial Office, 9th February, 1923 to 31st December, 1958.* In Official Year Book No. 17, 1924, there appeared the names of each Ministry up to the Bruce-Page Ministry (9th February, 1923 to 22nd October, 1929), together with the names of the successive holders of portfolios therein, and issue No. 39 contained a list, commencing with the Bruce-Page Ministry, which covered the period between the date on which it assumed power, 9th February, 1923, and 31st July, 1951, showing the names of all persons who held office in each Ministry during that period.

This issue shows only particulars of the latest Menzies Ministry, as constituted on 10th December, 1958. For any subsequent changes see the Appendix to this volume.

## MENZIES MINISTRY—from 10th December, 1958.

(The State in which each Minister's electorate is situated is shown in parentheses.)

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|---|--|
| <p><b>*Prime Minister—</b><br/>THE RT. HON. R. G. MENZIES,<br/>C.H., Q.C. (Vic.).</p> <p><b>*Minister for Trade—</b><br/>THE RT. HON. J. MCEWEN (Vic.).</p> <p><b>*Treasurer—</b><br/>THE RT. HON. H. E. HOLT (Vic.).</p> <p><b>*Minister for External Affairs and Minister in Charge C.S.I.R.O.—</b><br/>THE RT. HON. R. G. CASEY, C.H.,<br/>D.S.O., M.C. (Vic.).</p> <p><b>*Vice-President of the Executive Council; and Minister for National Development—</b><br/>SENATOR THE HON. W. H. SPOONER,<br/>M.M. (N.S.W.).</p> <p><b>*Minister for Defence—</b><br/>THE HON. A. G. TOWNLEY (Tas.).</p> <p><b>*Minister for Territories—</b><br/>THE HON. P. M. C. HASLUCK (W.A.).</p> <p><b>*Minister for Labour and National Service—</b><br/>THE HON. W. MCMAHON (N.S.W.).</p> <p><b>*Minister for Shipping and Transport; and Minister for Civil Aviation—</b><br/>SENATOR THE HON. S. D. PALTRIDGE<br/>(W.A.).</p> <p><b>*Postmaster-General—</b><br/>THE HON. C. W. DAVIDSON, O.B.E.<br/>(Qld.).</p> | <p><b>*Minister for Immigration—</b><br/>THE HON. A. R. DOWNER (S.A.).</p> <p><b>*Attorney-General—</b><br/>THE HON. SIR GARFIELD BARWICK Q.C.,<br/>(N.S.W.)</p> <p><b>Minister for Repatriation—</b><br/>SENATOR THE HON. SIR WALTER COOPER,<br/>M.B.E. (Qld.).</p> <p><b>Minister for Health—</b><br/>THE HON. D. A. CAMERON, O.B.E.<br/>(Qld.).</p> <p><b>Minister for the Army—</b><br/>THE HON. J. O. CRAMER (N.S.W.).</p> <p><b>Minister for Air—</b><br/>THE HON. F. M. OSBORNE, D.S.C.<br/>(N.S.W.).</p> <p><b>Minister for Social Services—</b><br/>THE HON. H. S. ROBERTON (N.S.W.).</p> <p><b>Minister for Customs and Excise—</b><br/>SENATOR THE HON. N. H. D. HENTY<br/>(Tas.).</p> <p><b>Minister for Primary Industry—</b><br/>THE HON. C. F. ADERMANN (Qld.).</p> <p><b>Minister for Supply—</b><br/>THE HON. A. S. HULME (Qld.).</p> <p><b>Minister for the Interior; and Minister for Works—</b><br/>THE HON. G. FREETH (W.A.).</p> <p><b>Minister for the Navy—</b><br/>SENATOR THE HON. J. G. GORTON<br/>(Vic.)</p> |
|---|--|

\* Minister in the Cabinet.

(iv) *Commonwealth Ministers of State.* In Official Year Book No. 38 a statement was included showing the names of the Ministers of State who had administered the several Departments during the period 1st April, 1925, to 31st December, 1949 (pp. 74-79). This was in continuation of a similar statement covering the period from the inauguration of Commonwealth Government to 1925 which appeared in Official Year Book No. 18.

3. **Governors and State Ministers.**—The names of the Governors and members of the Ministries in each State in December, 1958, are as shown in the following statement. (Changes since December, 1958 are shown in the Appendix to this volume.)

#### NEW SOUTH WALES.

*Governor*—LIEUT.-GENERAL SIR ERIC WINSLOW WOODWARD, K.C.M.G., C.B., C.B.E., D.S.O., K.St.J.

*Ministry (from 15th March, 1956).*

(*Portfolios as from 25th November, 1957.*)

*Premier and Colonial Treasurer*—  
THE HON. J. J. CAHILL.

*Deputy Premier and Minister for Education*—  
THE HON. R. J. HEFFRON.

*Attorney-General, Minister of Justice and Vice-President of the Executive Council*—  
THE HON. R. R. DOWNING, M.L.C.

*Colonial Secretary, Minister for Immigration and Minister for Co-operative Societies*—  
THE HON. C. A. KELLY.

*Minister for Health*—  
THE HON. W. F. SHEAHAN, Q.C.

*Minister for Child Welfare and Minister for Social Welfare*—  
THE HON. F. H. HAWKINS.

*Minister for Local Government and Minister for Highways*—  
THE HON. J. B. RENSHAW.

*Minister for Transport*—  
THE HON. A. G. ENTICKNAP.

*Minister for Housing*—  
THE HON. A. LANDA.

*Secretary for Public Works*—  
THE HON. J. F. McGRATH.

*Minister for Conservation*—  
THE HON. E. WETHERELL.

*Secretary for Lands*—  
THE HON. W. M. GOLLAN.

*Minister for Agriculture and Minister for Food Production*—  
THE HON. R. B. NOTT.

*Minister for Labour and Industry*—  
THE HON. J. J. MALONEY, M.L.C.

*Secretary for Mines*—  
THE HON. J. B. SIMPSON.

*Minister without Portfolio*—  
THE HON. J. M. A. McMAHON.

#### VICTORIA.

*Governor*—GENERAL SIR REGINALD ALEXANDER DALLAS BROOKS, K.C.B., K.C.M.G., K.C.V.O., D.S.O., K.St.J.

*Ministry (from 7th June, 1955).*

(*Portfolios as from 8th July, 1958.*)

*Premier, Treasurer and Minister for Conservation*—  
THE HON. H. E. BOLTE.

*Chief Secretary and Attorney-General*—  
THE HON. A. G. RYLAH, E.D.

*Minister of Transport and a Vice-President of the Board of Land and Works*—  
THE HON. SIR ARTHUR WARNER, M.L.C.

*Minister of Agriculture and a Vice-President of the Board of Land and Works*—  
THE HON. G. L. CHANDLER, C.M.G., M.L.C.

*Commissioner of Public Works and a Vice-President of the Board of Land and Works*—  
THE HON. SIR THOMAS MALTBY, E.D.

*Minister of Health*—  
THE HON. E. P. CAMERON, M.L.C.

*Minister of Water Supply and Minister of Mines*—  
THE HON. W. J. MIBUS.

*Minister of Education*—  
THE HON. J. S. BLOOMFIELD.

*Minister of Housing and Minister of Immigration*—  
THE HON. H. R. PETTY.

*Commissioner of Crown Lands and Survey, Minister of Soldier Settlement and President of the Board of Land and Works*—  
THE HON. K. H. TURNBULL.

*Minister of Labour and Industry and Minister of Electrical Undertakings*—  
THE HON. G. O. REID.

*Minister for Local Government*—  
THE HON. M. V. PORTER.

*Minister of Forests and Minister of State Development*—  
THE HON. A. J. FRASER, M.C.

*Minister without Portfolio*—  
THE HON. L. H. S. THOMPSON, M.L.C.

GOVERNORS AND STATE MINISTERS—*continued.*

## QUEENSLAND.

*Governor*—COLONEL SIR HENRY ABEL SMITH, K.C.V.O., D.S.O.

*Ministry (from 12th August, 1957).*

<i>Premier and Chief Secretary; and Vice-President of the Executive Council—</i> THE HON. G. F. R. NICKLIN.	<i>Minister for Development, Mines and Main Roads—</i> THE HON. E. EVANS.
<i>Minister for Labour and Industry—</i> THE HON. K. J. MORRIS.	<i>Minister for Public Lands and Irrigation—</i> THE HON. A. G. MULLER.
<i>Minister for Education—</i> THE HON. J. C. A. PIZZEY.	<i>Minister for Health and Home Affairs—</i> THE HON. H. W. NOBLE.
<i>Minister for Justice—</i> THE HON. A. W. MUNRO.	<i>Minister for Agriculture and Stock—</i> THE HON. O. O. MADSEN.
<i>Treasurer and Minister for Housing—</i> THE HON. T. A. HILEY.	<i>Minister for Public Works and Local Government—</i> THE HON. J. A. HEADING, C.M.G.
	<i>Minister for Transport—</i> THE HON. G. W. W. CHALK.

## SOUTH AUSTRALIA.

*Governor*—AIR VICE-MARSHAL SIR ROBERT ALLINGHAM GEORGE, K.C.M.G., K.C.V.O., K.B.E., C.B., M.C.

*Ministry (from 15th May, 1944).*

<i>Premier, Treasurer and Minister of Immigration—</i> THE HON. SIR THOMAS PLAYFORD, G.C.M.G.	<i>Minister of Works and Minister of Marine—</i> THE HON. G. G. PEARSON.
<i>Chief Secretary, Minister of Health and Minister of Mines—</i> THE HON. SIR LYELL MCEWIN, K.B.E., M.L.C.	<i>Minister of Agriculture and Minister of Forests—</i> THE HON. D. N. BROOKMAN.
<i>Attorney-General and Minister of Industry and Employment—</i> THE HON. C. D. ROWE, M.L.C.	<i>Minister of Education—</i> THE HON. B. PATTINSON.
<i>Minister of Lands, Minister of Repatriation and Minister of Irrigation—</i> THE HON. C. S. HINCKS.	<i>Minister of Local Government, Minister of Roads and Minister of Railways—</i> THE HON. N. L. JUDE, M.L.C.

## WESTERN AUSTRALIA.

*Governor*—LIEUT.-GENERAL SIR CHARLES GAIRDNER, K.C.M.G., K.C.V.O., C.B., C.B.E.

*Ministry (from 20th April, 1956).*

*(Portfolios as from 13th November, 1958.)*

<i>Premier, Treasurer and Minister for Child Welfare—</i> THE HON. A. R. G. HAWKE.	<i>Minister for Education and Labour—</i> THE HON. W. HEGNEY.
<i>Deputy Premier and Minister for Works and Water Supplies—</i> THE HON. J. T. TONKIN.	<i>Minister for Lands, Agriculture and Fisheries—</i> THE HON. L. F. KELLY.
<i>Minister for Transport, Housing and Forests—</i> THE HON. H. E. GRAHAM.	<i>Minister for Native Welfare and Police—</i> THE HON. J. J. BRADY.
<i>Minister for Railways, the North-West and Supply and Shipping—</i> THE HON. H. C. STRICKLAND, M.L.C.	<i>Minister for Mines and Chief Secretary—</i> THE HON. A. M. MOIR.
<i>Minister for Health and Justice—</i> THE HON. E. NULSEN.	<i>Minister for Industrial Development, Local Government and Town Planning—</i> THE HON. F. J. S. WISE, M.L.C.

GOVERNORS AND STATE MINISTERS—*continued.*

## TASMANIA.

*Administrator*—THE HON. SIR STANLEY BURBURY, K.B.E.*Ministry (from 26th August, 1958).*

<i>Premier and Attorney-General</i> — THE HON. E. E. REECE.	<i>Minister for Lands and Works</i> — THE HON. D. A. CASHION.
<i>Deputy Premier and Minister for Agriculture</i> — THE HON. J. J. DWYER, V.C.	<i>Minister for Education</i> — THE HON. W. A. NEILSON.
<i>Chief Secretary</i> — THE HON. J. F. GAHA.	<i>Minister for Housing</i> — THE HON. C. B. AYLETT.
<i>Treasurer</i> — THE HON. R. J. D. TURNBULL.	<i>Minister for Forests</i> — THE HON. A. C. ATKINS.

4. **Leaders of the Opposition, Commonwealth and State Parliaments.**—The Leader of the Opposition plays an important part in the Party system of government which operates in the Australian Parliaments. The following list gives the names of the holders of this position in each of the Parliaments in December, 1958.

Leader of the Opposition, Commonwealth and State Parliaments—

*Commonwealth*—The Rt. Hon. H. V. Evatt, Q.C.  
*New South Wales*—P. H. Morton.  
*Victoria*—The Hon. C. P. Stoneham.  
*Queensland*—The Hon. J. E. Duggan.  
*South Australia*—M. R. O'Halloran.  
*Western Australia*—The Hon. D. Brand.  
*Tasmania*—The Hon. W. Jackson.

5. **The Course of Legislation.**—The actual legislation by the Commonwealth Parliament up to the end of 1956 is indicated in alphabetical order in "The Acts of the Parliament of The Commonwealth of Australia passed during the year 1956, in the First Session of the Twenty-second Parliament of the Commonwealth, with Tables, Appendix and Index".

A "Chronological Table of Acts passed from 1901 to 1956, showing how they are affected by subsequent legislation or lapse of time" is also given, and, further, "A table of Commonwealth Legislation passed from 1901 to 1956 in relation to the several provisions of the Constitution", is furnished. Reference should be made to these for complete information.

6. **Legislation during 1957.**—The following paragraphs present a selection from the legislative enactments of the Commonwealth Parliament during the year 1957. The acts included have been selected as the more important new measures and amending measures enacted during the year. The selection is somewhat arbitrary, however, because of the task of determining, in view of the limitations on space that might reasonably be allotted, the relative importance of the acts passed. Certain principles regulating the choice of acts have nevertheless been generally observed. Ordinary appropriation and loan acts are excluded, as are also acts relating to less important changes in existing forms of taxation, in superannuation and pension schemes, and in workers' compensation. Acts providing for minor amendments to existing statutes and continuance acts are similarly excluded.

The total enactments of the Commonwealth Parliament for a number of years at fairly even intervals since 1901 show a general increase. About 17 Acts were passed in 1901, 36 in 1914, 38 in 1927, 87 in 1939 and 103 in 1957.

In Official Year Book No. 40 (*see pp. 66-70*), and previous Year Books, similar information was published for the principal legislative enactments of State Parliaments.

*Commonwealth Legislation Passed in 1957.—Apple and Pear Export Charges Act 1957* (No. 8 of 1957). Amends the Apple and Pear Export Charges Act 1938–1947 by increasing to twopence a case the maximum rate of charge that may be imposed on apples and pears exported from the Commonwealth.

*Australian Wool Testing Authority Act 1957* (No. 38 of 1957). Establishes an Australian Wool Testing Authority to carry out tests of wool and wool products, which are the subject of trade and commerce with other countries or among the States, by agreement with persons desiring those tests, and to issue certificates in respect of tests carried out by the Authority. It defines the functions, powers and duties of the Authority.

*Beer Excise Act 1957* (No. 11 of 1957). Amends the Beer Excise Act 1901–1951. It simplifies the procedure for transferring beer from a brewery to another brewery or delivery store, renders a person having the control of beer on which duty has not been paid responsible for its safe custody and makes further provision for securing the payment of duty on beer which is in the possession of a person when the person's licence to make beer is cancelled.

*Civil Aviation Agreement Act 1957* (No. 86 of 1957). Approves the execution by the Commonwealth of an agreement which amends the Civil Aviation Agreement approved by the Civil Aviation Agreement Act 1952. The amending agreement is consequential on the purchase by Ansett Transport Industries Limited of all the issued shares in Australian National Airways Proprietary Limited.

*Commonwealth Aid Roads (Special Assistance) Act 1957* (No. 83 of 1957). Provides for the payment of an additional £3,000,000 in each of the financial years 1957–1958 and 1958–1959 to the States to supplement the payments authorized under the Commonwealth Aid Roads Act 1954–1956.

*Commonwealth Police Act 1957* (No. 85 of 1957). Repeals the Peace Officers Act 1925. It establishes a Commonwealth Police Force to perform the functions previously performed by the Commonwealth Investigation Service and the Peace Officer Guard. It defines the functions, powers and duties of the Commonwealth Police Force.

*Customs Tariff (Industries Preservation) Act 1957* (No. 91 of 1957). Amends the Customs Tariff (Industries Preservation) Act 1921–1956 to authorize the imposition of anti-dumping duties in respect of goods which the Minister is satisfied are being imported into Australia, or sold in Australia, at a price that is less than a fair and reasonable price and are being so sold to the detriment of the trade of Australia or of another country.

*Dairying Industry Act 1957* (No. 31 of 1957). Provides for the payment of bounties on the production of butter and cheese produced before 1st July, 1962.

*Diesel Fuel Tax Act (No. 1) 1957* (No. 96 of 1957). Imposes a tax at the rate of One shilling a gallon on diesel fuel purchased free of tax by the holder of a certificate and sold to a person who is not the holder of such a certificate. For the purposes of the Act, the holder of a certificate means a person to whom the Minister has issued a certificate certifying that the person requires diesel fuel for use otherwise than in propelling road vehicles on public roads.

*Diesel Fuel Tax Act (No. 2) 1957* (No. 97 of 1957). Imposes a tax at the rate of One shilling a gallon on diesel fuel purchased free of tax by the holder of a certificate and used by that person in propelling a road vehicle on a public road. For the purposes of the Act, the holder of a certificate means a person to whom the Minister has issued a certificate certifying that the person requires diesel fuel for use otherwise than in propelling road vehicles on public roads.

*Diesel Fuel Taxation (Administration) Act 1957* (No. 98 of 1957). Provides for the collection of the taxes imposed by the Diesel Fuel Tax Act (No. 1) 1957 and the Diesel Fuel Tax Act (No. 2) 1957. It also provides for the payment of a rebate of duty to persons who purchase diesel fuel on which duty has been paid and use it otherwise than for the purpose of propelling a road vehicle on a public road.

*Estate Duty Assessment Act 1957* (No. 60 of 1957). Amends the Estate Duty Assessment Act 1914–1956. It provides for the allowance of a rebate of estate duty where a person who succeeds to the whole or part of an estate on which estate duty has been paid dies within five years of succeeding to the estate. It exempts from estate duty devises, bequests or gifts *inter vivos* to public libraries, to public hospitals which are not carried on for the profit of individuals or to certain other charitable or benevolent institutions. It also provides for the allowances of a similar rebate of duty on property passing to the adopted child, step-child or ex-nuptial child of a deceased person as is allowed on property passing to a child of the marriage of the deceased.

*Excise Act 1957* (No. 10 of 1957). Amends the Excise Act 1901–1952 by exempting from excise duty aircraft's stores used within Australia on aircraft engaged on an international air service or flight. It makes further provision for securing the payment of duty on dutiable goods which remain at a factory upon the expiry or cancellation of its licence.

*Explosives Act 1957* (No. 33 of 1957). Amends the Explosives Act 1952 by providing a procedure for ensuring that a vessel carrying Commonwealth explosives, or into which Commonwealth explosives are to be loaded, is berthed at a port and wharf where adequate facilities are available for handling the explosives.

*Geneva Conventions Act 1957* (No. 103 of 1957). Makes provision for the punishment of offenders against four Geneva Conventions and for enforcing in Australia the provisions of the Conventions.

The Conventions are—

- (a) the Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field;
- (b) the Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of the Armed Forces at Sea;
- (c) the Geneva Convention relative to the Treatment of Prisoners of War; and
- (d) the Geneva Convention relative to the Protection of Civilian Persons in Time of War.

The texts of the Conventions are set out in the Schedules to the Act.

*High Commissioner (United Kingdom) Act 1957* (No. 14 of 1957). Amends the High Commissioner Act 1909–1952. It authorizes the fixing of the remuneration and allowances payable to the High Commissioner by the Governor-General, makes new provision for determining the terms and conditions of employment of officers and employees on the staff of the High Commissioner and provides for the appointment of a person to act in the office of High Commissioner during the absence from duty of the High Commissioner or when the office of High Commissioner becomes vacant.

*Loan (International Bank for Reconstruction and Development) Act 1957* (No. 5 of 1957). Approves the borrowing by the Treasurer on behalf of the Commonwealth, in accordance with the Loan Agreement dated 3rd December, 1956, between the Commonwealth and the International Bank for Reconstruction and Development, of moneys not exceeding 50,000,000 dollars in the currency of the United States of America to finance development programmes described in Schedule 2 of the Loan Agreement.

*Loan (Qantas Empire Airways Limited) Act 1957* (No. 6 of 1957). Approves the borrowing by the Treasurer on behalf of the Commonwealth from the International Bank for Reconstruction and Development, in accordance with the Loan Agreement dated 15th November, 1956, between the Commonwealth and the Bank, of moneys not exceeding 9,230,000 dollars in the currency of the United States of America to assist in financing development programmes in connexion with Qantas Empire Airways Limited described in Schedule 2 of the Loan Agreement. It also approves the borrowing, in accordance with the agreement set out in the Second Schedule to the Act, of 17,770,000 dollars in the currency of the United States of America to assist in financing those programmes.

*National Capital Development Commission Act 1957* (No. 42 of 1957). Provides for the establishment of a National Capital Development Commission to undertake and carry out the planning, development and construction of Canberra. It defines the functions, powers and duties of the Commission.

*National Health Act 1957* (No. 92 of 1957). Amends the National Health Act 1953–1956. It increases the amount of Commonwealth hospital benefits payable to a person who is entitled to receive not less than sixteen shillings a day from a hospital benefits organization.

*National Service Act 1957* (No. 16 of 1957). Amends the National Service Act 1951–1953. It confines national service training to service in the Army, and reduces the period of service to 140 days.

*National Service Act (No. 2) 1957* (No. 40 of 1957). Provides that the period spent by an apprentice in undergoing national service training is to be regarded as a period of employment under his contract of apprenticeship.

*Native Members of the Forces Benefits Act 1957* (No. 89 of 1957). Provides for the payment of repatriation benefits to natives of the Territory of Papua or the Territory of New Guinea or of an island of the Torres Strait or the Pacific Ocean who served in the Defence Forces during the 1939–1945 War and whose service has been terminated by discharge or death, and to dependents of such natives.

*Norfolk Island Act 1957* (No. 29 of 1957). Repeals and replaces the Norfolk Island Act 1913–1935 and provides for the government of Norfolk Island.

*Petroleum Search Subsidy Act 1957* (No. 90 of 1957). Provides for the payment of subsidies to persons carrying out stratigraphic drilling operations in accordance with agreements entered into by the Minister.

*Stevedoring Industry Act 1957* (No. 93 of 1957). Amends the Stevedoring Industry Act 1956 by vesting in the Commonwealth Conciliation and Arbitration Commission the power to cancel or suspend the registration of an employer and the power to hear appeals by waterside workers against deregistration. It also enables the Australian Stevedoring Industry Authority to postpone the cancellation or suspension of registration of a waterside worker pending an appeal against that cancellation or suspension.

*Wheat Research Act 1957* (No. 22 of 1957). Establishes a Wheat Research Trust Account into which is to be paid amounts received by the Commonwealth under the Wheat Tax Act 1957, a Commonwealth contribution and other moneys. It establishes a Wheat Industry Research Council and, in each State other than Tasmania, a Wheat Research Committee to approve payments from the Trust Account for research, training and publicity likely to benefit the wheat industry.

*Wheat Tax Act 1957* (No. 21 of 1957). Imposes a tax at the rate of one-fourth of a penny a bushel on all wheat delivered to the Australian Wheat Board.

*Wine Grapes Charges Act 1957* (No. 41 of 1957). Amends the Wine Grapes Charges Act 1929–1954 by increasing the maximum rates of levy that may be imposed on grapes delivered to wineries or distilleries for use in the manufacture of wine.

*Wool Research Act 1957* (No. 26 of 1957). Repeals the Wool Industry Fund Act 1946 and establishes a Wool Research Trust Fund into which is to be paid the amount received by the Commonwealth for research purposes under the Wool Tax Act (No. 1) 1957 and under the Wool Tax Act (No. 2) 1957, a Commonwealth contribution and other moneys. It establishes a Wool Research Committee to make recommendations as to expenditure from a Trust Fund for research, training and publicity in connexion with the wool industry.

*Wool Tax Act (No. 1) 1957* (No. 23 of 1957). Imposes a tax, for research and promotion purposes, respectively, at rates to be fixed by Regulations on all wool produced in Australia, and, on or after 1st July, 1957, received by a wool-broker or dealer.

*Wool Tax Act (No. 2) 1957* (No. 24 of 1957). Imposes a tax, for research and promotion purposes, respectively, at rates to be fixed by Regulations on all wool produced in Australia, and, on or after 1st July, 1957, exported from Australia, not being wool which has been received by a wool-broker or dealer.

*Wool Tax Assessment Act 1957* (No. 25 of 1957). Repeals the *Wool Tax Act (No. 1) 1952* and the *Wool Tax Act (No. 2) 1952*, and amends the *Wool Tax Assessment Act 1936-1953* to permit the collection under that Act of the taxes imposed by the *Wool Tax Act (No. 1) 1957* and the *Wool Tax Act (No. 2) 1957*.

*Wool Use Promotion Act 1957* (No. 27 of 1957). Amends the *Wool Use Promotion Act 1953* by omitting the provisions relating to the appointment and duties of the Commonwealth Wool Adviser. It also provides for payment into the *Wool Use Promotion Fund* of the amount received by the Commonwealth for promotion purposes under the *Wool Tax Act (No. 1) 1957* and under the *Wool Tax Act (No. 2) 1957*.

#### § 4. Commonwealth Government Departments.

Official Year Book No. 37 contains, on pp. 76-86, a list of the Commonwealth Government Departments as at 31st March, 1947, showing details of the matters dealt with by each Department, and the Acts administered by the Minister of each Department, and Year Book No. 39 contains, on pp. 100-1, a description of major changes in Departmental structure from 1947 to 1951. Apart from the structural changes and transfers of functions described therein, there are several Departments which, in the interval between 1947 and 1956, were developed to cope with changing circumstances affecting the particular Department. The Prime Minister's Department, the Department of Immigration, and the Department of Social Services were among those whose organizations were thus altered. On page 81 of Official Year Book No. 43, details were shown of a major re-organization, in January, 1956, of the functions of the Departments of Commerce and Agriculture and Trade and Customs, resulting in the creation of the Departments of Trade, Customs and Excise, and Primary Industry. In April, 1958, the Departments of Supply and Defence Production were amalgamated under the name of Department of Supply, consequent on the report of the Morshead Committee on the organization of the Defence group of Departments.

#### § 5. Cost of Parliamentary Government.

The tables in this section are intended to represent the expenditure incurred in the operation of the Parliamentary system in Australia, comprising the Governor-General and Governors, the Ministries, the Upper and Lower Houses of Parliament, and electoral activities: they do not attempt to cover the expenditure on Commonwealth and State administration generally.

Comparison between individual items should be made with caution because of differences in accounting and presentation.

The following statement shows this expenditure for the Commonwealth and for each State, as well as the cost per head of population, for the year ended 30th June, 1957. In order to avoid incorrect conclusions as to the cost of the Governor-General's or Governor's establishment, it may be pointed out that a very large part of the expenditure (with the exception of the item "Governor's salary") under the head of Governor-General or Governor represents official services entirely outside the Governor's personal interest, and carried out at the request of the Government.

COST OF PARLIAMENTARY GOVERNMENT, 1956-57.

(£)

Particulars.	C'with.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
<b>1. Governor-General or Governor(a)—</b>								
Governor's salary .. .. .	10,000	5,307	6,000	5,325	13,400	4,750	4,000	48,782
Other salaries .. .. .	16,763	25,350	8,095	10,748	7,417	5,338	18,856	92,567
Other expenses, including main- tenance of house and grounds	157,015	13,819	46,654	18,056	7,401	25,400	8,898	277,243
<b>Total</b> .. .. .	<b>183,778</b>	<b>44,476</b>	<b>60,749</b>	<b>34,129</b>	<b>28,218</b>	<b>35,488</b>	<b>31,754</b>	<b>418,592</b>
<b>2. Ministry—</b>								
Salaries of Ministers .. .. .	68,512	76,807	21,636	41,340	28,657	13,900	8,644	259,496
Travelling expenses .. .. .	21,868	(b)	948	(b)	(b)	2,048	3,600	28,464
Other .. .. .	372	2,155	..	(b)	(b)	6,343	13,124	21,994
<b>Total</b> .. .. .	<b>90,752</b>	<b>78,962</b>	<b>22,584</b>	<b>41,340</b>	<b>28,657</b>	<b>22,291</b>	<b>25,368</b>	<b>309,954</b>
<b>3. Parliament—</b>								
<b>A. Upper House :</b>								
President and Chairman of Committees .. .. .	2,900	3,866	1,249	..	2,800	5,717	..	35758
Allowance to members .. .. .	184,637	29,681	75,029	..	30,950	70,669	..	443,256
Railway passes(c) .. .. .	2,680	23,657	(d)9,000	..	1,639	8,390	1,433	46,799
Other travelling expenses .. .. .	e 11,424	..	..	..	..	(f)	..	11,424
Postage for members .. .. .	..	..	..	..	303	1,268	..	1,571
<b>B. Lower House :</b>								
Speaker and Chairman of Committees .. .. .	2,900	5,568	1,250	5,993	5,050	4,781	..	63960
Allowance to members .. .. .	381,540	221,799	147,674	153,834	62,527	116,569	1,814	1,173,445
Railway passes (c) .. .. .	6,400	44,108	(g)	11,622	3,195	13,894	..	81,033
Other travelling expenses .. .. .	e 22,709	2,400	..	14,561	..	(d)1,131	..	40,801
Postage for members .. .. .	..	6,779	..	8,022	576	2,023	..	17,400
<b>C. Both Houses :</b>								
Government contribution to Members' Superannuation Fund .. .. .	19,528	(h)7,951	17,796	7,474	7,694	6,767	..	67,210
Printing— Hansard .. .. .	68,094	20,163	22,195	12,711	8,334	17,175	..	148,672
Other .. .. .	70,767	38,541	45,924	5,734	26,190	5,657	11,668	204,481
Reporting Staff— Salaries .. .. .	65,565	29,806	24,939	8,649	23,931	27,120	..	180,010
Contingencies .. .. .	2,165	559	500	228	921	389	..	4,762
Library— Salaries .. .. .	39,722	14,554	11,093	5,517	5,265	100	..	76,251
Contingencies .. .. .	14,429	3,761	2,000	6,925	1,518	425	..	29,058
Salaries of other officers .. .. .	324,980	119,755	75,183	24,061	28,473	38,024	22,923	633,399
Other .. .. .	(i)18,365	4,117	9,508	4,908	13,760	800	1,149	252,607
<b>D. Miscellaneous :</b>								
Fuel, light, heat, power, and water .. .. .	5,123	5,290	7,293	2,507	6,671	243	..	342,252
Posts, telegraphs, telephones .. .. .	25,154	11,599	927	1,627	2,841	961	..	13987
Furniture, stores and stationery .. .. .	30,941	4,894	5,672	2,412	12,462	346	..	..
Other .. .. .	(j)140,828	21,976	9,494	8,161	6,223	14,720	..	..
<b>Total</b> .. .. .	<b>1640851</b>	<b>620,824</b>	<b>466,726</b>	<b>284,946</b>	<b>251,323</b>	<b>337,069</b>	<b>152,692</b>	<b>3,754,431</b>
<b>4. Electoral—</b>								
Salaries .. .. .	394,059	8,166	5,163	18,800	13,526	22,213	8,875	470,806
Cost of elections, contingencies, etc. .. .. .	131,959	16,697	31,384	35,483	3,000	7,087	20,131	245,741
<b>Total</b> .. .. .	<b>526,018</b>	<b>24,863</b>	<b>36,547</b>	<b>54,283</b>	<b>16,526</b>	<b>29,300</b>	<b>29,016</b>	<b>716,547</b>
<b>5. Royal Commissions, Select Com-   mittees, etc. .. .. .</b>	<b>13,795</b>	<b>..</b>	<b>12,749</b>	<b>2,915</b>	<b>124</b>	<b>1,376</b>	<b>..</b>	<b>30,959</b>
<b>Grand Total</b> .. .. .	<b>2455194</b>	<b>769,125</b>	<b>599,355</b>	<b>417,613</b>	<b>324,848</b>	<b>425,524</b>	<b>238,874</b>	<b>5,230,483</b>
<i>Cost per head of population</i> .. .. .	<i>5s. 2d.</i>	<i>4s. 3d.</i>	<i>4s. 6d.</i>	<i>6s. 1d.</i>	<i>7s. 7d.</i>	<i>12s. 5d.</i>	<i>14s. 8d.</i>	<i>11s. 0d.</i>

(a) Includes Executive Council except in Tasmania, where duties are performed by Chief Secretary's Department. (b) Not available separately. (c) Actual amounts paid to the respective Railway Departments, except in New South Wales and Western Australia, where the amounts shown represent the value of railway passes as supplied by the Railway Departments. (d) Both Houses. (e) While in Canberra. See also (i). (f) Included with Lower House. (g) Included with Upper House. (h) Lower House only. (i) Conveyance of Members of Parliament and others not elsewhere included. (j) Includes maintenance of Ministers' and Members' rooms, £63,421, and additions, new works, buildings, etc., £29,292. (k) Includes Ex-Ministers' and Ex-Members' Life Passes (Rail), £3,314.

Figures for total cost and cost per head during each of the years 1949–50 to 1956–57 are shown in the next table.

**COST OF PARLIAMENTARY GOVERNMENT.**

Year.	C'wealth.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
TOTAL.								
(£.)								
1949–50 ..	1,418,532	427,955	361,387	248,174	174,240	213,611	112,615	2,956,514
1950–51 ..	1,624,998	430,814	303,417	246,941	181,758	212,933	117,208	3,118,069
1951–52 ..	1,853,709	508,024	407,278	298,401	215,673	298,601	156,982	3,738,668
1952–53 ..	2,089,968	679,946	474,731	349,262	254,147	296,449	161,383	4,305,886
1953–54 ..	2,072,757	645,505	419,261	452,527	290,110	302,586	175,525	4,358,271
1954–55 ..	2,007,013	710,639	535,939	348,458	281,351	325,772	189,699	4,398,871
1955–56 ..	2,532,246	742,753	586,940	474,515	372,493	451,042	224,940	5,384,929
1956–57 ..	2,455,194	769,125	599,355	417,613	324,848	425,524	238,824	5,230,483

**PER HEAD OF POPULATION.**  
(s. d.)

1949–50 ..	3 6	2 9	3 4	4 3	5 0	7 10	8 2	7 4
1950–51 ..	3 11	2 8	2 8	4 2	5 0	7 6	8 3	7 6
1951–52 ..	4 4	3 1	3 6	4 10	5 10	10 2	10 8	8 9
1952–53 ..	4 9	4 0	4 0	5 7	6 8	9 8	10 8	9 10
1953–54 ..	4 8	3 9	3 6	7 0	7 5	9 7	11 4	9 10
1954–55 ..	4 5	4 1	4 4	5 3	7 0	10 0	12 1	9 8
1955–56 ..	5 5	4 3	4 7	7 0	8 11	13 6	14 1	11 7
1956–57 ..	5 2	4 3	4 6	6 1	7 7	12 5	14 8	11 0

**§ 6. Government Employees.**

Information concerning the number of employees of Australian Government Authorities may be found in Chapter XII.—Labour, Wages and Prices.

## CHAPTER IV.

### LAND TENURE AND SETTLEMENT.

#### § 1. Introduction.

For descriptions of the land tenure systems of the several States and the internal Territories see Official Year Book No. 4 (pp. 235–333) and subsequent issues, in particular No. 22 (pp. 133–195). Conspectuses of land legislation in force and of the systems of land tenure in the several States have appeared in issues up to and including No. 38, but only a brief summary is given below.

The land legislation in force in the several States may be classified broadly under five major types of land enactments, i.e., Crown Lands Acts, Closer Settlement Acts, Mining Acts, Returned Service Personnel Settlement Acts, and Advances to Settlers Acts, but within the groupings there is, of course, a wide variety of individual Acts. In the two internal Territories, the legislation relating to lands is embodied in various ordinances.

In each of the States, there is a Lands Department under the direction of a Minister who is charged generally with the administration of the Acts relating to the alienation, occupation and management of Crown Lands. In the Northern Territory, the Administrator, under the control of the Minister for Territories, is charged with the general administration of the Lands Ordinance and of Crown lands in the Northern Territory. In the Australian Capital Territory, the administration of the Leases Ordinances is in the hands of the Department of the Interior.

In each of the States, there is also a Mines Department which is empowered under the several Acts relating to mining to grant leases and licences of Crown lands for mining and allied purposes. In the Northern Territory, there are several ordinances relative to mining.

As with land legislation, land tenures may be classified under broad headings; these indicate the nature of the tenure and comprise:—Free Grants and Reservations, Unconditional Purchases of Freehold, Conditional Purchases of Freehold, Leases and Licences under Land Acts, Closer Settlement, Leases and Licences under Mining Acts, and Settlement of Returned Service Personnel. For details of the various particular forms of land tenure within these seven groups in each State, see Official Year Book No. 38 (pp. 114–116) and earlier issues. Descriptions of the systems operating in the two internal Territories may be found on pages 329–30 and 338 of Official Year Book No. 39.

The following sections contain figures showing the extent of the different tenures in the several States and Territories, together with some general descriptive matter.

#### § 2. Free Grants and Reservations.

1. *New South Wales.*—(i) *Free Grants.* Crown lands may, by notification in the *Gazette*, be dedicated for public purposes and be granted therefor in fee-simple. Such lands may be placed under the care and management of trustees, not less than three nor more than seven in number, appointed by the Minister.

(ii) *Reservations.* Temporary reservations of Crown lands from sale or lease may be made by the Minister.

(iii) *Areas Granted and Reserved.* During 1956–57, 5,239 acres were permanently reserved or dedicated for miscellaneous recreation reserves and similar purposes. The areas reserved at 30th June, 1957, were as follows:— For travelling stock, 5,289,633 acres; pending classification and survey, 4,346,434 acres; forest reserves 2,335,322 acres; water and camping reserves, 852,728 acres; mining reserves, 1,111,647 acres; for recreation and parks, 524,594 acres; other reserves, 6,892,795 acres; total, 21,353,153 acres.

2. *Victoria.*—(i) *Free Grants.* The Governor may grant, convey or otherwise dispose of Crown lands for public purposes.

(ii) *Reservations.* The Governor may temporarily or permanently reserve from sale, lease or licence any Crown lands required for public purposes.

(iii) *Areas Granted and Reserved.* During 1957, 129 acres were granted without purchase. The areas both temporarily and permanently reserved at the end of 1957 were as follows :—For roads, 1,667,649 acres ; water reserves, 317,656 acres ; agricultural colleges, etc., 8,434 acres ; forest and timber reserves, 5,700,427 acres ; reserves in the mallee, 410,000 acres ; other reserves, 544,339 acres ; total, 8,648,505 acres.

(iv) *Revoking of Agricultural Reservations.* Under the Agricultural Colleges Act 1944, the land on which the agricultural colleges and experimental farms at Longerenong (2,386 acres) and Dookie (6,048 acres) are established is permanently reserved as sites for the purposes of State Agricultural Colleges and the remainder of the lands previously reserved has become unalienated for treatment as such under the Lands Act (*see also* § 5, para. 3).

3. *Queensland.*—(i) *Free Grants.* The Governor may grant in trust any Crown land which is or may be required for public purposes. Under the Irrigation Acts, land to be used for the purpose of any undertaking under the Acts may be vested in fee simple in the Commissioner of Irrigation and Water Supply.

(ii) *Reservations.* The Governor may reserve from sale or lease, either temporarily or permanently, any Crown land which is or may be required for public purposes. Reserved lands may be placed under the control of trustees who are empowered to lease them for not more than 21 years with the approval of the Minister.

Under the State Forests and National Parks Acts, the Governor may permanently reserve any Crown lands and declare them to be a State Forest or a National Park.

(iii) *Areas Granted and Reserved.* During 1957, no areas were granted in fee simple without payment, 138,042 acres were set apart as reserves and reserves cancelled totalled 130,653 acres. The areas reserved, including roads, at the end of 1957 were as follows :—Timber reserves, 3,039,820 acres ; for State forests and national parks, 5,864,770 acres ; aboriginal reserves, 7,848,833 acres ; for streets, surveyed roads and stock routes, 3,711,308 acres ; general reserves, 5,632,193 acres ; total, 26,096,924 acres.

4. *South Australia.*—(i) *Free Grants.* The Governor may dedicate Crown lands for any public purpose and grant the fee simple of such lands, with the exception of foreshores and lands for quays, wharves or landing-places, which are inalienable in fee simple from the Crown.

(ii) *Reservations.* The Governor may reserve Crown lands for the use and benefit of aboriginals, military defence, forest reserves, railway stations, park lands or any other purpose that he may think fit.

(iii) *Areas Granted and Reserved.* During 1956–57, free grants were issued for an area of 768,024 acres, including 768,000 acres granted to Commonwealth Weapons Research Establishment, and reserves comprising 6,196 acres were proclaimed. At 30th June, 1957, the total area of surveyed roads, railways and other reserves was 22,641,441 acres, including 18,788,501 acres set apart as aboriginal reserves.

5. *Western Australia.*—(i) *Free Grants.* The Governor may dispose of, in such manner as for the public interest may seem best, any lands vested in the Crown for public purposes, and may grant the fee simple of any reserve to secure the use thereof for the purpose for which such reserve was made.

(ii) *Reservations.* The Governor may reserve any lands vested in the Crown for public purposes. Areas not immediately required may be leased by the Governor for periods up to 10 years. Reserves may be placed under the control of a local authority or trustees, with power to lease them for a period not exceeding 21 years, or may be leased for 99 years. Temporary reserves may also be proclaimed.

(iii) *Areas Granted or Reserved.* During the year ended 30th June, 1957, approximately 1,309,133 acres were reserved for various purposes. At 30th June, 1957, the total area reserved was 56,937,893 acres, comprising State forests, 3,990,295 acres, timber reserves, 1,821,378 acres and other reserves 51,126,220 acres.

6. *Tasmania.*—(i) *Free Grants.* No mention is made in the Crown Lands Act respecting free grants of land, and it is expressly stated that no lands may be disposed of as sites for religious purposes except by way of sale under the Act. Under the Returned Soldiers' Settlement Act 1916, returned soldiers who applied prior to 31st March, 1922 were eligible to receive free grants of Crown land not exceeding £100 each in value, but these grants were conditional on the land being adequately improved.

(ii) *Reservations.* The Governor in Council may except from sale or lease, and reserve to Her Majesty any Crown land for public purposes, and vest for such term as he thinks fit any land so reserved in any person or corporate body. Any breach or non-fulfilment of the conditions upon which such land is reserved renders it liable to forfeiture. A school allotment, not exceeding 5 acres in area, may also be reserved.

7. Northern Territory.—(i) *Reservations.* The Governor-General may resume for public purposes any Crown lands not subject to any right of, or contract for, purchase, and may reserve, for the purpose for which they are resumed, the whole or any portion of the lands so resumed.

(ii) *Areas Reserved.* The total area of reserves at 30th June, 1957 was 47,927,661 acres.

8. Summary.—The following table shows the total areas reserved in each State, and the grand totals, for the years 1953 to 1957 :—

## AREAS RESERVED.

('000 Acres.)

	N.S.W. (a)	Victoria. (b)	Q'ld. (b)	S. Aust. (a)	W. Aust. (a)	Tas. (a)	Nor. Terr. (a)	Total.
1953 ..	20,319	8,429	25,797	21,265	52,238	4,069	47,001	179,118
1954 ..	20,344	8,451	25,873	21,336	52,613	4,070	47,032	179,719
1955 ..	20,865	8,631	25,939	21,863	55,224	4,129	47,544	184,195
1956 ..	21,261	8,634	26,067	21,867	55,629	4,130	47,928	185,516
1957 ..	21,353	8,649	26,097	22,641	56,938	(c)	47,928	(c)

(a) At 30th June.

(b) At 31st December.

(c) Not available.

## § 3. Unconditional Purchases of Freehold.

1. New South Wales.—(i) *Auction Purchases.* Crown lands, not exceeding in the aggregate 200,000 acres in any one year, may be sold by public auction in areas not exceeding half-an-acre for town lands, 20 acres for suburban lands, and 640 acres for country lands, at the minimum upset price of £8, £2 10s., and 15s. per acre respectively. At least 10 per cent. of the purchase-money must be paid at the time of sale, and the balance within three months, or the Minister may allow the payment of such balance to be deferred for a period not exceeding ten years, 4 per cent. interest being charged. Town blocks in irrigation areas may also be sold by auction.

(ii) *After-auction Purchases.* In certain cases, land offered at auction and not sold may be purchased at the upset price. A deposit in accordance with the terms and conditions under which the land was previously offered must be lodged, and, if the application be approved by the Minister, the balance of purchase money is payable as required by the specified terms and conditions.

(iii) *Special Purchases.* In certain circumstances, land may be sold in fee simple, the purchaser paying the cost of survey and of reports thereon, in addition to the purchase-money as determined by the local Land Board.

(iv) *Improvement Purchases.* The owner of improvements in land in authorized occupation by residence under any Mining Act or the Western Lands Act of land within a gold-field or mineral field may purchase such land without competition at a price determined by the local Land Board, but at not less than £8 per acre for town lands or £2 10s. per acre for other lands. The area must not exceed  $\frac{1}{4}$  acre within a town or village, or two acres elsewhere, and no person may purchase more than one such area within three miles of a similar prior purchase by him.

(v) *Road Purchases.* Land from roads that are closed may, with certain exceptions, be sold to the owners of adjoining lands at a value determined by the local Land Board.

(vi) *Areas Sold.* During the year ended 30th June, 1957, the total area sold was 1,971 acres, of which 25 acres were sold by auction and two acres as after auction purchases, while 34 acres were sold as improvement purchases, 1,831 acres as road purchases and 79 acres as special purchases.

2. Victoria.—(i) *General.* Lands, not exceeding 100,000 acres in any one year, specially classed for sale by auction, may be sold by auction in fee simple at an upset price of not less than £1 per acre. The purchaser must pay the survey fee at the time of the sale, together

with a deposit of 12½ per cent. of the whole price ; the residue is payable in equal half-yearly instalments with interest. Any unsold land in a city, town or borough area, areas specially classed for sale, isolated pieces of land not exceeding 150 acres in area, and sites for churches or charitable purposes, if not more than three acres in extent, may be sold by auction on the same terms. Swamp or reclaimed lands may also be sold by auction, subject to the condition that the owner keeps open all drains, etc., thereon.

(i) *Areas Sold at Auction and by Special Sales.* During 1957, a total of 1,087 acres was disposed of under this tenure, 858 acres being country lands and 229 acres town and suburban lands.

3. *Queensland.*—From 1917 to 1929, the law precluded land being made available for any class of selection which gave the selector the right to acquire the freehold title. Amending legislation giving power to make land available under freehold tenures was passed in 1929. This provision was repealed by the Act of 1932, but restored by the Act of 1957.

4. *South Australia.*—(i) *Sales by Auction.* The following lands may be sold by auction for cash :—(a) special blocks ; (b) Crown lands which have been offered for lease and not taken up within two years ; (c) town lands ; and (d) suburban lands which the Governor excepts from the operations of the Land Board. A purchaser must pay 20 per cent. of the purchase money in cash, and the balance within one month or within such extended time as the Commissioner of Crown Lands may allow. Town lands may be sold subject to the condition that they cannot be transferred or mortgaged within six years without the consent of the Commissioner. If the Commissioner of Crown Lands so determines, town lands may also be offered at auction on terms and the buyer may at his option purchase the lands for cash or on agreement for sale and purchase.

(ii) *Areas Sold, etc.* During the year ended 30th June, 1957, the area of town lands and special blocks sold by auction was 22 acres. In addition, 48,234 acres were sold at fixed prices, and purchases on credit of 28,457 acres were completed, making a total of 76,713 acres.

5. *Western Australia.*—(i) *Sales by Auction.* Town, suburban and village lands may be sold by auction after being surveyed into lots and notified in the *Gazette*. They may also be disposed of after being exempted from auction or after being passed in at auction. Ten per cent. of the purchase-money must be paid in cash, together with the value of any improvements, and the balance in four equal quarterly instalments. Suburban land must be fenced within two years, and no Crown grant may be issued until the land is fenced.

(ii) *Areas Sold.* During the year ended 30th June, 1957, the area of town and suburban allotments sold by auction was 308 acres in 318 allotments.

6. *Tasmania.*—(i) *Sales by Auction.* Town lands may be sold by auction.

(ii) *After-auction Sales.* Town lands, which, after having been offered at auction, have not been sold, may be sold at the upset price by private contract.

(iii) *Sales of Land in Mining Towns.* Any person being the holder of a residence licence or a business licence who shall be in lawful occupation of any residence area or business area, and who shall be the owner of buildings and permanent improvements upon such land of a value equal to or greater than the upset price of such area, shall be entitled to purchase such area at the upset price at any time prior to the day on which such area is to be offered for sale as advertised. The upset price for such area shall be determined by valuation, excluding the value of improvements, cost of survey, and of grant deed. The area which may be so purchased must not exceed one-quarter of an acre, but, with the consent of the Commissioner, the purchaser of a residence area may purchase the adjoining lot, if available for sale, by private contract but the total area shall not exceed one-half an acre.

#### § 4. Conditional Purchases of Freehold.

1. *General.*—The various methods of obtaining Crown lands by conditional purchase in the several States are given in some detail in preceding issues of the Official Year Book (see No. 22, pp. 141–9).

2. *New South Wales.*—At 30th June, 1957, the total number of incomplete conditional purchases in existence was 33,751 covering an area of 11,153,065 acres. During 1956–57, applications received for conditional purchases numbered ten, of which eight, with an area of 1,072 acres, were confirmed ; during the year, deeds were issued for 591,272 acres, bringing the total acreage for which deeds had been issued to 35,642,461 at the end of the year. These figures exclude 487 conversions from other tenures—comprising 127,726 acres.

3. **Victoria.**—The area purchased conditionally in 1957, excluding selections in the Mallee Country was 1,120 acres, all with residence. The number of selectors was six. In the Mallee, 2,928 acres were purchased conditionally in 1957. The number of selectors was seven.

4. **Queensland.**—The following selections were made freehold during 1957:—Agricultural farms, 37,726 acres, prickly pear selections, 72,667 acres, and prickly pear development selections, 6,598 acres.

5. **South Australia.**—During 1956–57, 313 acres were allotted under agreements to purchase, comprising surplus lands, four acres, Eyre Peninsula Railway Lands, 14 acres, Eyre Peninsula Land Purchase Act lands, three acres, and other Crown lands, 292 acres.

6. **Western Australia.**—During the year ended 30th June, 1957, the number of holdings conditionally alienated was 491, the total area involved being 698,613 acres, comprising conditional purchases by deferred payments, 698,481 acres and free homestead farms, 132 acres. Under the heading “deferred payments”, are included conditional purchases of grazing lands.

In addition, Crown grants were issued during 1956–57 for the following selections, the prescribed conditions having been complied with:—Free homestead farms, 11,633 acres, and conditional purchases, 472,507 acres.

7. **Tasmania.**—During 1956–57, Crown grants were issued for 17,927 acres. The total area sold conditionally was 1,390 acres, comprising selections for purchase, 1,262 acres, and town and suburban allotments, 128 acres. The numbers of applications confirmed were 72 for country selections and 93 for town and suburban allotments.

§ 5. Leases and Licences under Land Acts.

1. **General.**—Information regarding the methods of obtaining leases and licences of Crown lands in the several States and Territories was given in earlier issues of the Official Year Book (see No. 22, pp. 149–63).

2. **New South Wales.**—The following table shows the areas held under various descriptions of leases and licences under the control of the Department of Lands, the Water Conservation and Irrigation Commission and the Western Lands Commission at 30th June, 1957.

AREAS OCCUPIED UNDER LEASE OR LICENCE AT 30th JUNE, 1957, NEW SOUTH WALES.(a)  
(Acres.)

Particulars.	Area.	Particulars.	Area.
<i>Crown Lands or Closer Settlement Acts</i>		<i>Crown Lands or Closer Settlement Acts—continued.</i>	
Occupation licences .. ..	529,789	Suburban holdings .. ..	53,237
Conditional leases .. ..	10,651,584	Group purchase leases .. ..	222,434
Conditional purchase leases .. ..	121,734	Irrigation areas .. ..	192,872
Settlement leases .. ..	2,590,940	Other leases(b) .. ..	161,771
Improvement leases .. ..	27,898		
Annual leases .. ..	389,376	<i>Western Lands Act.</i>	
Scrub leases .. ..	4,800	Conditional leases .. ..	121,596
Special leases .. ..	1,401,363	Perpetual leases .. ..	67,164,115
Permissive occupancies .. ..	1,933,467	Other long-term leases .. ..	10,195,924
Prickly pear leases .. ..	89,827	Permissive occupancies .. ..	270,571
Crown leases .. ..	7,059,690	Leases being issued—occupation licences .. ..	95,858
Homestead farms .. ..	4,958,408	Preferential occupation licences .. ..	124,549
Homestead selections and grants .. ..	1,691,847		
Closer settlement leases .. ..	2,848,964		
Settlement purchase leases .. ..	1,044,666		
		<b>Total .. ..</b>	<b>113,947,280</b>

(a) Excludes mining leases and permits, forest leases, and occupation permits. (b) Includes leases outside irrigation areas, controlled by the Water Conservation and Irrigation Commission—143,065 acres.

3. **Victoria.**—The area of Crown lands occupied under leases and licences at 31st December, 1957 was as follows:—Grazing licences—other than Mallee, 4,063,956 acres; Mallee, 1,679,875 acres; auriferous lands licences, 15,846 acres; perpetual leases—other than Mallee, 17,819 acres; Mallee, 41,852 acres; swamp lands leases, 3,978 acres; agricultural college lands, 27,327 acres; total, 5,850,653 acres.

4. **Queensland.**—The area occupied under lease or licence, excluding mining leases, at the end of 1957 was as follows:—Pastoral leases, 247,001,240 acres; occupation licences, 15,191,720 acres; grazing selections and settlement farm leases, 90,984,447 acres; special purpose leases—Crown land, 480,897 acres; reserves, 1,998,439 acres; perpetual lease (including prickly pear) selections, 6,831,749 acres; auction perpetual leases, 39,454 acres; forest grazing leases (reserves), 945,240 acres; total, 363,473,186 acres.

5. **South Australia.**—The total area, including repurchased lands held under lease or licence except mining lease and licence, at 30th June, 1957 was 139,726,560 acres of which pastoral leases, 117,294,733 acres, constituted the major proportion.

6. **Western Australia.**—At 30th June, 1957, the total area held under lease or licence issued by the Lands Department amounted to 212,830,904 acres, of which 208,396,798 acres were under pastoral lease.

7. **Tasmania.**—Crown lands leased at 30th June, 1957, for other than mining purposes amounted to 1,575,872 acres of which 1,122,022 acres were leased for pastoral purposes.

8. **Northern Territory.**—At 30th June, 1957, the total area under lease, etc., was 177,027,672 acres of which pastoral leases accounted for 139,296,115 acres and other leases, licences and mission stations, 37,731,557 acres.

9. **Australian Capital Territory.**—Under the terms of the City Area Leases Ordinance 1936–1951, each block is leased for a period of 99 years at a rental of five per cent. per annum of the unimproved capital value as assessed by the Commonwealth. The number of leases granted under this Ordinance to 30th June, 1957 (excluding leases surrendered and determined) was 3,631 representing an unimproved value of £1,544,135. Auction sales of city leaseholds are described in Official Year Book No. 22, p. 599. During the year ended 30th June, 1957, 544 leases were granted for residential purposes and 23 for business purposes.

Thirteen leases under the Church Lands Leases Ordinance 1924–1932, which require the lessees to submit a definite building programme within a specified period, and one lease under the Church of England Lands Ordinance 1926, have been granted for church purposes. A further 28 leases have been granted for either church or scholastic purposes under the various Ordinances.

The total area held under lease and licence for grazing, agricultural, dairying and other purposes (including the Jervis Bay area) amounted to 296,364 acres at 30th June, 1957.

10. **Summary.**—The following table shows particulars of the land held in each State under lease or licence for purposes other than mining and forestry, the total leased or licensed land in the Territories, and the grand totals, for the years 1953 to 1957.

**AREAS OCCUPIED UNDER LEASE OR LICENCE OTHER THAN MINING  
AND FORESTRY.**  
(’000 Acres.)

Year.	N.S.W. (a)	Vic. (b)	Q’land. (b)	S. Aust. (a)	W. Aust. (a)	Tas. (a)	N.T. (a) (c)	A.C.T. (a)(c)(d)	Total.
1953 ..	114,913	7,501	361,594	139,509	202,761	2,712	180,015	323	1,009,328
1954 ..	114,452	6,367	361,657	137,867	202,754	2,576	180,020	323	1,006,016
1955 ..	114,311	6,502	363,870	137,461	204,782	2,487	181,165	321	1,010,899
1956 ..	114,231	6,175	363,093	139,640	212,380	2,466	177,021	314	1,015,320
1957 ..	113,947	5,851	363,473	139,727	212,831	1,576	177,028	296	1,014,729

(a) At 30th June. (b) At 31st December. (c) Leases and licences for all purposes.  
(d) Includes Jervis Bay area.

### § 6. Leases and Licences under Mining Acts.

1. **General.**—Information regarding the various forms of leases and licences under Mining Acts in the several States and the Northern Territory is given in preceding issues of the Official Year Book (see No. 22, pp. 170–7). The following paragraphs contain particulars of operations during the year 1956–57 or 1957 and of areas occupied at the end of the year, under the various forms of lease, licence, etc., issued for mining purposes.

2. **New South Wales.**—At 30th June, 1957, total areas occupied under Mining Acts were as follows:—Gold-mining, 2,966 acres; mining for other minerals, 201,259 acres; authorities to prospect, 114,645 acres; other purposes, 8,175 acres; total, 327,045 acres.

3. **Victoria.**—During 1957, there were 117 leases and licences granted under Mining Acts, including 15 for gold-mining. Areas occupied at the end of 1957 were as follows:—Gold-mining, 15,469 acres; petroleum prospecting, 2,940,160 acres; coal, 10,864 acres; uranium and radio active minerals, 4,073 acres; other purposes, 5,723 acres; total, 2,976,289 acres.

4. **Queensland.**—During 1957, there were 3,119 miners' rights and one business licence issued. Areas taken up during 1957 totalled 554,193 acres, of which 18,543 acres were for mining for minerals other than gold and 512,000 acres occupied under Petroleum Prospecting Permits. Total areas occupied at the end of 1957 were as follows:—Gold-mining, 2,161 acres; mining for other minerals, 133,889 acres; miners' homesteads, 426,214 acres; petroleum prospecting, 704,000 acres; coal prospecting, 24,803 acres; total, 1,291,067 acres. The area of land held under lease only was 562,264 acres.

5. **South Australia.**—Areas taken up under Mining Acts during 1956–57 totalled 6,025 acres, including claims, 4,257 acres, mineral and miscellaneous leases, 1,748 acres, and gold leases 20 acres. Total areas occupied at 30th June, 1957 were as follows:—Gold-mining, 603 acres; other mineral and miscellaneous leases, 765,210 acres; claims, 14,044 acres; oil licences, 141,944,000 acres; other purposes, 24 acres; total, 142,723,881 acres.

6. **Western Australia.**—Areas taken up during 1957 under Mining Acts totalled 25,644 acres, including gold-mining, 10,328 acres, and mining for other minerals, 15,171 acres. Total areas occupied at the end of 1957 were as follows:—Gold-mining, 28,626 acres; mining for other minerals, 95,472 acres; other purposes, 38,101 acres; total, 162,199 acres.

7. **Tasmania.**—During 1957, the number of leases issued covered 6,767 acres, including coal-mining, 1,838 acres and tin-mining, 535 acres. Total areas occupied at the end of 1957 were as follows:—Gold-mining, 658 acres; coal-mining, 9,865 acres; mining for other minerals, 22,534 acres; other purposes, 4,568 acres; total, 37,625 acres.

8. **Northern Territory.**—At 30th June, 1957, the number and acreage of holdings under mining leases and tenements were as follows:—Gold-mining leases, 272 (4,442 acres); other minerals leases, 426 (11,045 acres); dredging areas, 18 (3,856 acres); gold and other mineral prospecting areas, 11 (203 acres); business and residence areas, 79 (145 acres); other purposes, 179 (9,783 acres); total, 985 (29,474 acres).

9. **Summary.**—(a) *Mining Leases etc., (other than oil prospecting licences).* The following table shows the total areas occupied under Mining Acts in each State at the end of the years 1953 to 1957:—

**AREAS OCCUPIED UNDER MINING ACTS.**  
(Acres.)

Year.	N.S.W. (a)	Victoria.	Q'land. (b)	S. Aust. (a) (b)	W. Aust. (c)	Tasmania. (b)	Total. (d)
1953 ..	355,868	39,917	528,821	44,742	148,932	31,398	1,149,678
1954 ..	13,053,930	97,041	545,469	775,650	166,378	30,059	14,668,527
1955 ..	8,151,778	55,544	555,996	773,816	159,891	30,408	9,727,433
1956 ..	13,924,407	37,723	570,384	770,618	151,916	33,178	15,488,226
1957 ..	326,932	36,129	587,067	779,881	162,199	37,625	1,929,833

(a) Year ended 30th June. (b) Excludes lands held under miners' rights and dredging claims  
(c) Excludes holdings under miners' rights. (d) Excludes Northern Territory.

(b) *Oil Prospecting Licences.* The following table shows for each year from 1953 to 1957 the areas occupied in each State under authorities to prospect or explore for petroleum or other oils.

**AREAS OCCUPIED UNDER AUTHORITIES TO PROSPECT FOR PETROLEUM.**  
(<sup>000</sup> Acres.)

Year.	N.S.W. (a)	Victoria.	Q'land.	S. Aust. (a)	W. Aust.	Tasmania.	Total.
1953 ..	2,016	918	512	..	392	..	3,838
1954 ..	1,024	2,881	1,212	155,968	3,282	..	164,367
1955 ..	13,984	3,851	576	136,480	3,529	..	158,420
1956 ..	32,237	3,861	192	141,944	3,915	..	182,149
1957 ..	34,739	2,940	704	141,944	3,900	..	184,227

(a) Year ended 30th June.

### § 7. Closer Settlement.

1. *General.*—Particulars regarding the methods of acquisition and disposal of land for closer settlement in the several States are given in issues of the Official Year Book up to No. 22 (*see* No. 22, pp. 163–9) and the results of the operations of the several schemes have appeared in subsequent issues in considerable detail. In more recent years, however, the amalgamation, in some States, of closer settlement records with those of other authorities has made it impossible to obtain up-to-date figures for those States and for Australia as a whole, although aggregations of State totals as at the latest dates available have been published as rough approximations intended to convey some idea of the extent of the schemes throughout Australia. Particulars in this issue are restricted to a summary only of the position in each State at the latest date available.

2. *New South Wales.*—From the inception of closer settlement in 1905 to 30th June, 1957, 2,631 estates totalling 7,008,141 acres had been purchased by the Crown at a cost of £33,635,808 for purposes of closer settlement of civilians and returned service personnel.

Closer settlement is now being effected entirely under perpetual leasehold tenure (closer settlement leases).

3. *Victoria.*—The Closer Settlement Commission was abolished as from 31st December, 1938, and land settlement was placed under the control of the Department of Lands and Survey. On 31st March, 1939, all Closer Settlement and Discharged Soldiers' accounts were amalgamated, the settlers' accounts adjusted and the new debt made payable over an extended period. Particulars of the operations under the provisions of the Closer Settlement Acts to 30th June, 1938, the latest date for which separate details are available, were given in earlier issues of the Official Year Book, (*see* No. 42, p. 98).

4. *Queensland.*—Separate records relating to the closer settlement of re-purchased land are no longer kept by the Land Administration Board, and the operations under this heading are now included with "Leases and Licences under Land Acts." Details of the position at 31st December, 1934, the latest date for which the information is available, were given in earlier issues of the Official Year Book, (*see* No. 42, page 98).

5. *South Australia.*—The total area re-purchased for closer settlement at 30th June, 1957 was 948,885 acres, at a cost of £2,865,200. Included in these figures are 51,872 acres purchased for £185,285, and afterwards set apart for returned service personnel, 3,214 acres reserved for forest and waterworks purposes the purchase-money being £16,185, and also 26,563 acres of swamp and other lands, which were purchased for £111,850, in connexion with reclamation of swamp-lands on the River Murray. Of the total area, 819,034 acres have been allotted to 2,798 persons.

6. *Western Australia.*—The total area acquired for closer settlement up to 30th June, 1957 was 3,073,486 acres, costing £4,427,302. Particulars of operations under the Act for the year ended 30th June, 1957 are as follows:—Area selected during the year, 5,035 acres; number of farms, etc., allotted to date, 2,468; total area occupied to date, 2,078,009 acres; area set aside for roads, reserves, etc., 20,972 acres; balance available for selection, 974,505 acres.

7. *Tasmania.*—Up to 30th June, 1957, 38 areas had been opened up for closer settlement, the total purchase-money paid by the Government being £371,548 and the total area acquired amounting to 104,554 acres, including 12,149 acres of Crown lands. The number of farms occupied at 30th June, 1957 was 73.

### § 8. Settlement of Returned Service Personnel.

1. *War Service Land Settlement Scheme.*—(i) *General.* The War Service Land Settlement Scheme provides for the settlement on the land of eligible ex-servicemen from the 1939–45 War and the Korea-Malaya operations. Finance for capital expenditure under the scheme in South Australia, Western Australia and Tasmania and for special loans to New South Wales and Victoria is provided through annual Loan (War Service Land Settlement) Acts. Finance for other aspects of the Scheme in all States is provided by annual parliamentary appropriation. The States Grants (War Service Land Settlement) Act 1952 provides that the responsible Commonwealth Minister may make grants of financial assistance to the States under such terms as he may from time to time determine.

New South Wales, Victoria and Queensland agreed, at the inception of the Scheme, to find their own finance for the acquisition and development of properties. In 1954, Queensland abandoned the Scheme and made available for general settlement all unallotted lands held under it.

In an effort to hasten the settlement of qualified applicants in New South Wales and Victoria, the Commonwealth, since 1st July, 1955, has made available to New South Wales and Victoria repayable loans with a maximum of £2 million to each State in any one year. The extent of these loans is dependent on provisions by the State from its own funds for amounts advanced and can be briefly summarized as follows:—Total advances from inception (1st July, 1955) to 30th June, 1958.—New South Wales, £4,891,433; Victoria, £5,198,708.

For more detailed information about the agreements and the methods of operation and administration of the Scheme, see Official Year Book No. 37, pp. 113-8. Issue No. 39 contains a brief general description of the Scheme.

(ii) *Summary of Operations to 30th June, 1958.* The following table shows the operations of the War Service Land Settlement Scheme in each State up to 30th June, 1958.

**WAR SERVICE LAND SETTLEMENT.**  
SUMMARY TO 30TH JUNE, 1958.

State.	Land Acquired.	Farms Allotted.		Farms in Course of Development.	
	Acres.	No.	Acres.	No.	Acres.
New South Wales—(a)					
Western Lands ..	6,151,607	214	6,151,607	..	..
Subdivision (Irrigation) ..	186,299	337	186,299	..	..
„ (Dry) ..	1,238,881	1,087	1,238,881	..	..
Promotions (Irrigation) ..	92,000	136	92,000	..	..
„ (Dry) ..	1,456,131	1,235	1,456,131	..	..
<i>Total, New South Wales</i>	<b>9,124,918</b>	<b>3,009</b>	<b>9,124,918</b>	..	..
Victoria .. ..	1,221,527	2,828	1,071,977	393	149,550
Queensland .. ..	398,524	470	218,640	..	(b) 179,884
South Australia ..	708,444	849	449,819	192	258,625
Western Australia ..	2,114,062	805	1,375,084	293	709,795
Tasmania .. ..	424,647	340	170,620	478	254,027
<b>Total .. ..</b>	<b>13,992,122</b>	<b>8,301</b>	<b>12,411,058</b>	<b>1,356</b>	<b>1,551,881</b>

(a) In New South Wales, properties are regarded by the State as being allotted at the date of acquisition. (b) War Service Land Settlement was discontinued in 1954, unallotted lands were made available for general settlement.

(iii) *Expenditure.* The following table shows a dissection of the Commonwealth expenditure on War Service Land Settlement to 30th June, 1958.

**WAR SERVICE LAND SETTLEMENT (1939-45 WAR AND KOREA/MALAYA OPERATIONS): COMMONWEALTH EXPENDITURE TO 30th JUNE, 1958.**  
(£.)

Advances to States.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Total.
For acquisition of land ..	..	..	..	2,999,189	3,455,670	1,760,750	8,215,609
For development and improvement of land ..	..	..	..	11,995,567	16,055,891	8,845,770	36,897,228
Special Loans ..	4,891,433	5,198,708	..	..	..	..	10,090,141
Commonwealth contributions to excess cost over valuation ..	237,230	2,748,638	116,105	495,600	407,722	201,760	4,207,055
To provide credit facilities to settlers ..	..	..	..	3,505,165	10,353,880	2,504,601	16,363,646
For remission of settlers' rent and interest ..	377,146	137,152	36,214	112,929	313,559	92,059	1,069,059
For payment of living allowances to settlers ..	959,493	983,000	163,136	275,117	355,655	107,361	2,843,762
For operation and maintenance of irrigation projects ..	..	..	..	473,215	16,611	1,751	491,577
Loss on advances ..	..	1,005	18,725	6,824	67,870	1,968	96,392
Cost of administration of credit facilities ..	..	..	..	122,142	435,411	53,762	611,315
<b>Total .. ..</b>	<b>6,465,302</b>	<b>9,068,503</b>	<b>334,180</b>	<b>19,985,748</b>	<b>31,462,269</b>	<b>13,569,782</b>	<b>80,885,784</b>

Repayments of expenditure to 30th June, 1958, on the acquisition, development and improvement of land amounted to £6,203,389, and on the provision of credit facilities to settlers to £7,459,897, so that the total expenditure was reduced by £13,663,286 to £67,222,498. In addition, miscellaneous receipts in South Australia, Western Australia and Tasmania to 30th June, 1958, amounted to £3,082,410.

2. **Loans and Allowances (Agricultural Occupations) Scheme.**—(i) *General.* Full details of the measures taken to provide for the re-establishment of ex-servicemen in rural occupations were given in Official Year Book No. 37, pp. 117-8.

(ii) *Loans (Agricultural Occupations).* The following table shows particulars for each State and certain Territories to 30th June, 1958:—

**LOANS (AGRICULTURAL OCCUPATIONS) : SUMMARY TO 30th JUNE, 1958.**

State.	Applications.			Loans Approved.		Advanced by Commonwealth Treasury to Lending Authorities.	Advanced by Lending Authorities to Applicants. (b)
	Re-ceived.	Ap-proved.	Refused, With-drawn or Not Yet Approved.	Gross Amount.	Net Approvals. (a)		
				£	£	£	£
New South Wales	7,776	6,303	1,473	4,960,417	5,484	4,254,353	2,660,000
Victoria ..	4,818	3,350	1,468	2,176,011	3,090	2,016,960	1,040,000
Queensland ..	2,379	1,975	404	1,097,690	1,610	891,584	610,000
South Australia ..	2,135	1,288	847	1,004,548	1,225	962,934	465,000
Western Australia	3,201	2,290	911	2,159,228	2,153	2,025,885	1,111,450
Tasmania ..	1,128	762	366	473,746	732	454,885	300,400
Northern Territory	34	15	19	11,945	12	10,148	10,148
New Guinea ..	17	8	9	7,272	7	6,772	6,772
Norfolk Island ..	3	1	2	1,000	..	..	..
<b>Total ..</b>	<b>21,491</b>	<b>15,992</b>	<b>5,499</b>	<b>11,891,857</b>	<b>14,313</b>	<b>10,623,521</b>	<b>6,203,770</b>

(a) After deduction of loans declined after approval—£1,268,336. (b) Includes advances from principal repaid by borrowers.

These loans are made to eligible ex-servicemen for the purchase of land, effecting improvements on land, the acquisition of tools of trade, livestock, plant or equipment, the establishment of a co-operative business with other persons, reduction or discharge of a mortgage, bill of sale, etc.

(iii) *Allowances (Agricultural Occupations).* The following table shows details for each State and New Guinea to 30th June, 1958:—

**ALLOWANCES (AGRICULTURAL OCCUPATIONS) : SUMMARY TO 30th JUNE, 1958.**

State.	Applications.			Advanced by Commonwealth Treasury to Bank.	Allowances Paid.
	Received.	Approved.	Rejected, Withdrawn or Not Yet Approved.		
				£	£
New South Wales ..	4,078	3,625	453	582,000	580,056
Victoria ..	3,068	2,311	757	296,500	296,013
Queensland ..	3,044	2,515	529	477,431	477,431
South Australia (a) ..	2,265	1,756	509	325,000	324,609
Western Australia ..	3,020	2,610	410	480,788	480,788
Tasmania ..	634	523	111	116,150	116,114
New Guinea ..	5	4	1	1,360	1,360
<b>Total ..</b>	<b>16,114</b>	<b>13,344</b>	<b>2,770</b>	<b>2,279,229</b>	<b>2,276,371</b>

(a) Includes allowances paid to four ex-servicemen in the Northern Territory.

These allowances are payable only in respect of the period during which the income derived from the occupation by the ex-serviceman concerned is considered inadequate.

3. **War Service Land Settlement Division—Total Expenditure.**—The following table shows details of the total expenditure on various projects by the War Service Land Settlement Division from the commencement of operations to 30th June, 1958.

COMMONWEALTH WAR SERVICE LAND SETTLEMENT DIVISION:  
TOTAL EXPENDITURE TO 30th JUNE, 1958.  
(£.)

	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	N.T.	N.G.	Total.
War Service Land Settlement expenditure from Revenue on Loan Funds ..	6,465,302	9,068,503	334,180	19,985,748	31,462,269	13,569,782	..	..	80,885,784
Agricultural Loans(a)	4,279,901	1,796,791	872,655	826,612	1,961,928	405,335	10,148	6,772	10,160,142
Agricultural Allowances ..	582,000	296,500	477,431	325,000	480,788	116,150	..	1,360	2,279,229
Administration Expenses ..	624,479	144,014	68,597	72,462	325,904	42,044	..	..	1,277,500
Rural Training ..	327,268	494,961	106,211	189,877	225,806	106,756	..	..	1,450,879
<b>Total ..</b>	<b>12,278,950</b>	<b>11,800,769</b>	<b>1,859,074</b>	<b>21,399,699</b>	<b>34,456,695</b>	<b>14,240,067</b>	<b>10,148</b>	<b>8,132</b>	<b>96,053,534</b>

(a) Includes expenditure on new loans of moneys repaid by borrowers.

The following summary sets out the Net Expenditure to 30th June, 1958, after allowing for miscellaneous receipts and repayments:—

	£
Miscellaneous Receipts to 30th June, 1958—	
War Service Land Settlement ..	3,082,410
Agricultural Loans and Allowances ..	5,589,611
Rural Training ..	148,738
<b>Total ..</b>	<b>8,820,759</b>
Repayments, War Service Land Settlement Loans ..	13,663,286
<b>Total Receipts and Repayments ..</b>	<b>22,484,045</b>
Total Expenditure to 30th June, 1958 ..	96,053,534
less Receipts and Repayments ..	22,484,045
<b>Net Expenditure to 30th June, 1958 ..</b>	<b>73,569,489</b>

§ 9. Advances to Settlers.

1. General.—A detailed statement regarding the terms and conditions governing advances to settlers in the several States and the Northern Territory may be found in earlier issues of the Official Year Book (*see* No. 22, pp. 179–186).

The summaries of loans and advances in the following paragraphs are compiled from returns supplied by the various State government lending agencies in the several States. They include the transactions in lands acquired under closer and soldier settlement schemes, but exclude the balances owing on former Crown lands sold on the conditional purchase, etc., system.

The amounts outstanding do not represent the actual differences between the total advances and settlers' repayments, for considerable remissions of indebtedness have been made in all States as a result of reappraisements of land values and the writing down of debts. In general, they include both principal and interest outstanding.

A summary for Western Australia is not included, as practically the only Governmental funds being made available are Commonwealth (*see* § 8 above).

In New South Wales and Victoria, expenditure on the acquisition, development and improvement of land for war service land settlement is provided for by the States, and particulars thereof are included in the respective summaries. In Queensland, no money is paid for the value of the land acquired, most land being occupied on lease from the Government, but advances in respect of improvements are included. In the other States, this expenditure is provided for by the Commonwealth and particulars are included in § 8 above.

Loans (Agricultural Occupations) under the Commonwealth Re-establishment and Employment Act 1945 and certain advances for the purchase of wire-netting and for other purposes made from finance provided by the Commonwealth are included in the summaries following.

2. New South Wales.—The following table shows particulars respecting advances, etc., under State Authorities to 30th June, 1957:—

ADVANCES TO SETTLERS, ETC. : NEW SOUTH WALES.

Advances, etc.	Advances, etc., made during 1956-57.	Total Advances, etc., at 30th June, 1957.	Balance outstanding at 30th June, 1957.	
			Number of Accounts.	Amount.
	£	£		£
<i>Department of Lands—</i>				
Closer Land Settlement .. .. .		15,124,116	6,545	(a) 1,865,596
Soldier Settlers 1914-18 War .. .. .		(b) 3,196,005	127	31,716
1939-45 War .. .. .	1,459,628	12,151,813	5,663	4,452,938
Soldier Land Settlement—Acquisition, development and improvement of land, War Service Land Settlement Agreement Act .. .. .	1,997,298	25,593,106	2,472	c 23,546,684
Wire Netting .. .. .		1,494,653	43	4,043
Prickly Pear .. .. .	16,756	302,326	128	9,321
<i>Rural Bank—</i>				
<i>General Bank Department—</i>				
Commonwealth Re-establishment and Employment Act 1945 .. .. .	2,653	4,236,405	1,523	848,209
Other .. .. .	1,318,233	73,037,715	8,362	17,438,792
<i>Government Agency Department—</i>				
Rural Industries .. .. .	230,457	8,849,331	1,117	482,958
Unemployment Relief and Dairy Promotion .. .. .	311,924	3,580,464	2,119	1,370,859
Rural Reconstruction(d) .. .. .	429,942	13,644,723	779	1,968,294
Shallow Boring .. .. .	107,608	1,496,829	224	253,714
Farm Water Supplies .. .. .	27,331	494,855	432	354,386
Soil Conservation .. .. .	11,641	22,501	34	20,105
Rivers and Foreshores Improvement .. .. .	—400	—4,237	27	190
Irrigation Areas .. .. .	782,424	(e) .. .. .	359	3,847,552
Government Guarantee Agency .. .. .		225,475		
Closer Settlement Agency .. .. .		167,914	35	40,823
<b>Total</b> .. .. .	<b>6,695,495</b>	<b>f163,622,468</b>	<b>30,009</b>	<b>56,536,180</b>

(a) Excludes an amount of £4,670,322 capitalized to 30th June, 1957, on conversion into leasehold under the Closer Settlement Amendment (Conversion) Act 1943. (b) In addition, the sum of £1,927,116 has been expended to 30th June, 1957 on developmental works on soldiers' settlements. (c) Comprising capital value of Closer Settlement Leases, £17,321,799, and unpaid balance and interest on structural improvements, £6,224,885. (d) Includes Debt Adjustment, Drought Relief, and Marginal Wheat Areas Scheme Advances (Commonwealth and State Moneys), amount outstanding £1,115,558. (e) Not available. (f) Incomplete.

3. Victoria.—The following table shows particulars respecting advances, etc., under State Authorities to 30th June, 1957:—

ADVANCES TO SETTLERS, ETC. : VICTORIA.

Advances, etc.	Advances, etc., made during 1956-57.	Total Advances, etc., at 30th June, 1957.	Balance outstanding at 30th June, 1957.	
			Number of Persons.	Amount.
	£	£		£
<i>State Savings Bank, Crédit Foncier—</i>				
Civilians .. .. .	50,744	11,795,488	567	447,974
Discharged Soldiers .. .. .		848,567	22	8,986
<i>Treasurer—</i>				
Cool Stores, Canneries, etc. .. .. .	10,918	1,621,367	(a) 2	621,599
<i>Department of Lands and Survey—</i>				
Closer Settlement Settlers and Soldier Settlers .. .. .		b 46,904,855	2,139	2,194,713
Cultivators of Land .. .. .		2,463,558	129	23,116
Wire Netting .. .. .		728,398	68	3,188
<i>Soldier Settlement Commission—</i>				
Purchase of land .. .. .	1,298,542	16,397,395		
Development and Improvement of Holdings .. .. .	2,733,126	22,030,489		c 16,908,596
Advances for sales of land not required for Soldier Settlement(d) .. .. .	94,176	1,198,178	9	202,178
Advances for Settlers' Lease Liability, Soldier Settlement Act 1946 .. .. .	3,343,073	15,066,816	1,844	13,943,244
Advances to assist in acquiring and developing single unit farms .. .. .	356,380	10,896,490	1,907	7,325,060
Advances for improvements, stock, implements, etc. .. .. .	732,725	3,795,550	1,282	1,340,859
Advances for shares in Co-operative Companies, Soldier Settlement Act 1946 .. .. .	15,000	125,164	212	96,435
Commonwealth Re-establishment and Employment Act 1945 Advances .. .. .		1,796,725	728	244,666
<b>Total</b> .. .. .	<b>8,634,684</b>	<b>135,669,040</b>	<b>8,909</b>	<b>43,360,614</b>

(a) Number of Companies. (b) Represents consolidated debts of settlers (Section 30, Act 4091). (c) After allowing an amount of £4,999,679 representing excess acquisition, development and improvement cost which has been written off. (d) Sale price of land not required for settlement, balance outstanding represents instalments not yet due where terms were given to purchasers.

4. Queensland.—The following table shows particulars of advances, etc. to 30th June, 1957. The figures exclude transactions in land :—

ADVANCES TO SETTLERS, ETC. : QUEENSLAND.

Advances, etc.	Advances, etc., made during 1956-57.	Total Advances, etc., at 30th June, 1957.	Balance outstanding at 30th June, 1957.	
			Number of Accounts.	Amount.
	£	£		£
Co-ordination of Rural Advances and Agricultural Bank Acts .. .. .	2,340,951	25,362,938	4,249	9,402,471
Discharged Soldiers' Settlement (a) .. .. .	..	2,467,913	206	37,735
Water Facilities .. .. .	..	58,079	1	53
Wire Netting, etc. .. .. .	..	1,019,403	205	11,867
Seed Wheat and Barley .. .. .	320 (b)	144,983	(c)	11,966
Drought Relief .. .. .	..	961,047	27	24,416
War Service Land Settlement .. .. .	185,973	3,760,508	437	2,357,099
Income (Unemployment Relief and State Development) Tax Acts (d) .. .. .	..	1,183,891 (e)	285	29,431
Irrigation .. .. .	..	54,914	5	725
Farmers' Assistance (Debt Adjustment Acts) .. .. .	..	1,044,490	62	92,020
Commonwealth Re-establishment and Employment Act 1945 .. .. .	1,014	871,693	294	79,164
<b>Total</b> .. .. .	<b>2,528,258</b>	<b>36,929,859 (e)</b>	<b>5,771</b>	<b>12,046,947</b>

(a) Includes advances to group settlers through the Lands Department, as well as advances through the Agricultural Bank. (b) Includes accrued interest. (c) Not available. (d) Largely for relief to cotton and tobacco growers and for rural development (ringbarking, clearing, fencing, etc.). (e) Incomplete.

5. South Australia.—The following table shows particulars respecting advances, etc., under State Authorities to 30th June, 1957 :—

ADVANCES TO SETTLERS, ETC. : SOUTH AUSTRALIA.

Advances, etc.	Advances, etc., made during 1956-57.	Total Advances, etc., at 30th June, 1957.	Balance outstanding at 30th June, 1957.	
			Number of Persons.	Amount.
	£	£		£
<i>Department of Lands—</i>				
Advances to Soldier Settlers .. .. .	4,931	5,053,855	147	1,151,115
Advances to Blockholders .. .. .	..	41,451	..	..
Advances for Sheds and Tanks .. .. .	..	75,693	19	3,938
Advances Under Closer Settlement Acts .. .. .	418	2,730,331	575	759,084
Advances under Agricultural Graduates Settlement Act .. .. .	..	62,258	10	19,767
Settlement of Returned Service Personnel, 1939-45 War .. .. .	352,163	2,887,543	874	2,145,248
<i>Primary Producers Assistance Department—</i>				
Advances in Drought-affected Areas .. .. .	..	2,146,768	4	1,245
Advances under Farmers Relief Acts .. .. .	..	4,435,509	4	884
<i>Irrigation Branch—</i>				
Advances to Civilians .. .. .	..	291,443	37	13,482
Advances to Soldier Settlers .. .. .	..	1,048,174	305	328,044
<i>State Bank of South Australia (Crédit Foncier Department)—</i>				
Advances to Settlers for Improvements .. .. .	38,851	1,100,492	178	160,199
Advances under Vermin and Fencing Acts .. .. .	2,736	1,393,249	82	34,579
Advances under Loans to Producers Act .. .. .	88,565	1,559,013	118	1,124,612
Commonwealth Re-establishment and Employment Act 1945 .. .. .	3,857	826,463	360	239,953
<b>Total</b> .. .. .	<b>491,521</b>	<b>23,652,242</b>	<b>2,713</b>	<b>5,982,150</b>

6. Western Australia.—The operations prior to 1945 covered in this section related to monies made available through, or by, the old Agricultural Bank and other Government Departments for the purpose of agricultural development. On 1st October, 1945, however, the Agricultural Bank was reconstituted as the Rural and Industries Bank of Western Australia, and was given authority to operate similarly to the associated banks. Certain securities in the books of the old bank were taken over by the general banking division of the new bank, and the clients concerned then operated with privileges and obligations similar to those provided by other banking institutions. The majority of the remaining securities, also, were eventually transferred.

At present, very limited funds are being made available by the State Government for advances for agricultural development. The bulk of the moneys for this purpose being provided by the Commonwealth Government under the War Service Land Settlement and Commonwealth Re-establishment and Employment Acts. Particulars of this expenditure are shown in § 8 above.

7. **Tasmania.**—The following table shows particulars of advances under State Authorities to 30th June, 1957. Although not regarded as outstanding advances by the Department of Agriculture the figures in connexion with closer and soldier land settlement have been included in the table for comparative purposes; the areas so purchased have been leased on 99-year terms having an option of purchase which the leaseholder may exercise at any time.

**ADVANCES TO SETTLERS, ETC. : TASMANIA.**

Advances, etc.	Advances, etc., made during 1956-57.	Total Advances, etc., at 30th June, 1957.	Balance outstanding at 30th June, 1957.	
			Number of Persons.	Amount.
<i>Agricultural Bank—</i>				
State Advances Act and Rural Credits .. .. .	£ 91,042	£ 3,406,041	644	£ 694,100.
Orchardists' Relief, 1926 .. .. .	.. .. .	46,832	..	..
Unemployed (Assistance to Primary Producers) Relief Act 1930-31 .. .. .	.. .. .	114,302	..	..
Bush Fire Relief 1934 .. .. .	.. .. .	14,555	1	9
Crop Losses, 1934-35 .. .. .	.. .. .	10,086	..	..
Assistance to Fruitgrowers Act 1941 .. .. .	.. .. .	34,556	2	69
Flood Sufferers' Relief Act 1942 .. .. .	.. .. .	3,764	..	..
Flood Sufferers' Relief Act 1944 .. .. .	.. .. .	1,902	..	..
Commonwealth Re-establishment and Employment Act 1945 .. .. .	201	407,404	273	146,626.
Primary Producers' Relief Act 1947 .. .. .	.. .. .	297,846	89	20,940
<i>Minister for Agriculture—</i>				
<i>Soldier Settlers—</i>				
Advances .. .. .	4,645	1,001,210	50	(a) 29,859
Purchase of Estates, etc.(b) .. .. .	70	2,558,286	(c) 367	313,553
<i>Closer Settlers—</i>				
Advances .. .. .	.. .. .	100,558	10	5,374
Purchase of Estates, etc.(b) .. .. .	26	527,324	87	75,742
<b>Total .. .. .</b>	<b>95,984</b>	<b>8,524,666</b>	<b>1,523</b>	<b>1,286,272</b>

(a) Excludes £204,813 advances capitalized, £79,166 advances written off to bad debts, and £40,789 written off to revaluation. (b) Not regarded as outstanding advances by the Department. (c) Number of leaseholders, including those to whom advances have been made.

8. **Northern Territory.**—During the year 1956-57, 53 advances totalling £44,675 were approved. At 30th June, 1957, the balance outstanding from 49 settlers, including interest, was £76,886.

9. **Summary of Advances.**—The following table is a summary for each State (except Western Australia) and the Northern Territory to the 30th June, 1957. The particulars so far as they are available, represent the total sums advanced to settlers, including amounts spent by the various Governments in the purchase and improvement of estates disposed of by closer and soldier land settlement, while the amounts outstanding reveal the present indebtedness of settlers to the Governments, including arrears of principal and interest but excluding amounts written off debts and adjustments for land revaluations. Particulars of Loans (Agricultural Occupations) under the Commonwealth Re-establishment and Employment Act 1945 and of certain advances for wire-netting and other purposes provided from Commonwealth funds are included.

**ADVANCES TO SETTLERS, ETC. : SUMMARY.**

State.	Advances, etc., made during 1956-57.	Total Advances, etc., at 30th June, 1957.	Balance outstanding at 30th June, 1957.	
			Number of Persons.	Amount.
	£	£		£
New South Wales(a) .. .. .	6,695,495	b163,622,468	30,009	56,536,180.
Victoria(a) .. .. .	8,634,684	135,669,040	8,909	43,360,614
Queensland .. .. .	2,528,258	36,929,859	(b)(c) 5,771	12,046,947
South Australia .. .. .	491,521	23,652,242	2,713	5,982,150
Tasmania .. .. .	65,104	8,469,116	1,651	1,286,272
Northern Territory .. .. .	(d) 44,675	(e)	49	76,886

(a) Includes expenditure on acquisition, development and improvement of land for war service land settlement (see p. 101). (b) Incomplete. (c) Number of accounts. (d) Advances approved (e) Not available.

### § 10. Alienation and Occupation of Crown Lands.

1. **General.**—The figures shown in the previous parts of this chapter show separately the areas alienated, in process of alienation, or occupied under various tenures. The following tables set out the position with regard to the tenure of land in each State, in the Northern Territory, and in the Australian Capital Territory during 1957. A summary for each State and Territory and for Australia as a whole is also supplied. Particulars for each year from 1946 to 1956 appear in *Primary Industries Bulletin* No. 50, Part 1.—Rural Industries, page 1. The area occupied includes roads, permanent reserves, forests, etc. In some cases, lands which are permanently reserved from alienation are occupied under leases or licences, and have been included therein. Lands occupied under leases or licences for pastoral purposes are frequently held on short tenures only, and could thus be made available for settlement practically whenever required.

2. **New South Wales.**—The total area of New South Wales is 198,037,120 acres, of which 26.8 per cent. had been alienated at 30th June, 1957; 6.5 per cent. was in process of alienation; 58.5 per cent. was held under leases and licences; and the remaining 8.2 per cent. was unoccupied, or held by the Crown.

The following table shows particulars as at 30th June, 1957:—

#### ALIENATION AND OCCUPATION OF CROWN LANDS : NEW SOUTH WALES, 30th JUNE, 1957.

(Acres.)

Particulars.	Area.	Particulars.	Area.
<b>1. Alienated.</b>		<b>3. Held under Leases and Licences.</b>	
Granted and sold prior to 1862 ..	7,146,579	Homestead selections and grants ..	1,691,847
Sold by auction and other sales, 1862 to date ..	15,730,427	Alienable leases, long-term and perpetual ..	25,557,954
Conditionally sold, 1862 to date ..	35,642,461	Long-term leases with limited right of alienation ..	1,650,314
Granted under Volunteer Land Regulations, 1867 to date ..	172,198	Other long-term leases ..	81,476,163
Granted for public and religious purposes ..	265,966	Short-term leases and temporary tenures ..	3,571,063
		Forest leases ..	1,771,767
	58,957,631	Mining and auriferous leases ..	195,223
Less lands resumed or reverted to Crown ..	5,949,985		
<b>Total ..</b>	<b>53,007,646</b>	<b>Total ..</b>	<b>115,914,331</b>
<b>2. In Process of Alienation.</b>		<b>4. Unoccupied—Particulars of Lord Howe Island not being available, the area, 3,220 acres, is included under unoccupied (approximate) ..</b>	
Conditional purchases ..	11,153,065		16,319,470
Closer settlement purchases ..	1,261,033		
Soldiers' group purchases ..	141,609		
Other forms of sale ..	239,966		
<b>Total ..</b>	<b>12,795,673</b>	<b>5. Total Area of State ..</b>	<b>198,037,120</b>

3. **Victoria.**—The total area of Victoria is 56,245,760 acres, of which 55.3 per cent. had been alienated up to the end of 1957; 4.0 per cent. was in process of alienation under deferred payments and closer settlement schemes; 15.7 per cent. was occupied under leases and licences; and 25.0 per cent. was unoccupied or held by the Crown.

The following table shows the distribution:—

**ALIENATION AND OCCUPATION OF CROWN LANDS: VICTORIA,  
31st DECEMBER, 1957.  
(Acres.)**

Particulars.	Area.	Particulars.	Area.
1. <i>Alienated</i> .. .. .	31,126,779	3. <i>Leases and Licences held—</i> Under Lands Department—	
		Perpetual Leases .. .. .	59,671
		Agricultural College Leases .. .. .	27,327
		Other Leases and Licences .. .. .	19,824
		Temporary (Yearly) Grazing Licences .. .. .	5,743,831
2. <i>In Process of Alienation—</i> Exclusive of Mallee and Closer Settlement Lands .. .. .	269,077	Under Mines Department (a) .. .. .	2,977,427
Mallee Lands (exclusive of Closer Settlement Lands) .. .. .	1,722,196		
Closer Settlement Lands .. .. .	234,940	<i>Total</i> .. .. .	8,828,080
		4. <i>Occupied by the Crown or Unoccupied</i> .. .. .	14,064,688
<i>Total</i> .. .. .	2,226,213	5. <i>Total Area of State</i> .. .. .	56,245,760

(a) Includes State Coal Mine area, 7,575 acres and State Electricity Commission area, 2,800 acres.

4. *Queensland.*—The total area of this State is 429,120,000 acres, of which, on 31st December, 1957, 5.9 per cent. was alienated; 0.6 per cent. was in process of alienation; and 84.8 per cent. was occupied under leases and licences. The remainder, 8.7 per cent., was either unoccupied or held as reserves or for roads.

The distribution is shown in the following table:—

**ALIENATION AND OCCUPATION OF CROWN LANDS : QUEENSLAND,  
31st DECEMBER, 1957.  
(Acres.)**

Particulars.	Area.	Particulars.	Area.
1. <i>Alienated—</i>		3. <i>Occupied under Leases and Licences—</i>	
By Purchase .. .. .	25,143,684	Pastoral Leases .. .. .	247,001,240
Without Payment .. .. .	92,183	Occupation Licences .. .. .	15,191,720
		Grazing Selections and Settlement Farm Leases .. .. .	90,984,447
		Leases—Special Purposes (a) .. .. .	2,479,336
		Mining Leases .. .. .	595,399
		Perpetual Leases Selections and Perpetual Lease Prickly Pear Selections .. .. .	6,831,749
		Auction Perpetual Leases, etc. Forest Grazing Leases (of Reserves) .. .. .	39,454
		<i>Total</i> .. .. .	945,240
<i>Total</i> .. .. .	25,235,867	<i>Total</i> .. .. .	364,068,583
		4. <i>Reserves (net, not leased), Surveyed Roads and Surveyed Stock Routes</i> .. .. .	23,153,245
2. <i>In Process of Alienation</i> .. .. .	2,517,076	5. <i>Unoccupied</i> .. .. .	14,145,227
		6. <i>Total Area of State</i> .. .. .	429,120,000

(a) Special leases of Crown land, 480,897 acres; special leases of reserves, 1,998,439 acres.

5. *South Australia.*—The area of South Australia is 243,244,800 acres and at 30th June, 1957, 6.3 per cent. was alienated; 0.2 per cent. in process of alienation; 57.4 per cent. occupied under leases and licences; and 36.1 per cent. occupied by the Crown or unoccupied.

The following table shows the distribution:—

**ALIENATION AND OCCUPATION OF CROWN LANDS : SOUTH AUSTRALIA,  
30th JUNE, 1957.**  
(Acres.)

Particulars.	Area.	Particulars.	Area.
<b>1. Alienated—</b>		<b>3. Held under Lease and Licence(a)—</b>	
Sold .. .. .	14,022,639	Perpetual Leases, including Ir-	
Free Grants .. .. .	914,023	rigation Leases .. .. .	19,736,523
Dedicated .. .. .	269,827	Pastoral Leases .. .. .	117,294,733
		Other Leases and Licences .. .. .	2,695,304
		<b>Total .. .. .</b>	<b>139,726,560</b>
<b>Total .. .. .</b>	<b>15,206,489</b>	<b>4. Area Unoccupied(b) .. .. .</b>	<b>87,805,226</b>
<b>2. In Process of Alienation .. .. .</b>	<b>506,525</b>	<b>5. Total Area of State .. .. .</b>	<b>243,244,800</b>

(a) Mining leases and licences have also been issued over an area comprising 142,723,881 acres.  
(b) Includes surveyed roads, railways and other reserves, salt water lakes, lagoons, and fresh water lakes.

6. Western Australia.—The total area of Western Australia is 624,588,800 acres, of which, at 31st December, 1957, 4.1 per cent. was alienated; 2.1 per cent. was in process of alienation; and 34.7 per cent. was occupied under leases and licences issued either by the Lands, Mines or Forests Departments. The balance of 59.1 per cent. was unoccupied.

The following table shows the distribution:—

**ALIENATION AND OCCUPATION OF CROWN LANDS : WESTERN AUSTRALIA,  
30th JUNE 1957.**  
(Acres.)

Particulars.	Area.	Particulars.	Area.
<b>1. Alienated .. .. .</b>	<b>25,726,950</b>	<b>3. Leases and Licences in Force—</b>	
		(i) Issued by Lands Department—	
<b>2. In Process of Alienation—</b>		Pastoral Leases .. .. .	208,396,798
Free Homestead Farms .. .. .	358,622	Special Leases .. .. .	2,587,376
Conditional Purchase .. .. .	10,557,218	Leases of Reserves .. .. .	695,789
Selections under the Agricultural		Residential Lots .. .. .	4,648
Lands Purchase Act .. .. .	297,659	Perpetual Leases .. .. .	1,146,292
Grazing Land .. .. .	1,541,658	(ii) Issued by Mines Department—	
Town and Suburban Lots .. .. .	1,626	Gold-mining Leases .. .. .	21,067
Crown Grants of Reserves .. .. .	80,499	Mineral Leases .. .. .	43,296
		Miners' Homestead	
		Leases .. .. .	33,039
		(iii) Issued by Forests Department—	
		Timber Permits .. .. .	3,882,488
		<b>Total .. .. .</b>	<b>216,810,793</b>
<b>Total .. .. .</b>	<b>12,837,282</b>	<b>4. Area Unoccupied .. .. .</b>	<b>369,213,775</b>
		<b>5. Total Area of State .. .. .</b>	<b>624,588,800</b>

7. Tasmania.—The total area of Tasmania is 16,778,000 acres, of which, at 30th June, 1957, 37.7 per cent. had been alienated; 1.9 per cent. was in process of alienation; 10.9 per cent. was occupied under leases and licences for either pastoral, agricultural, timber, or mining purposes, or for closer or soldier settlement; while the remainder (49.5 per cent.) was unoccupied or reserved by the Crown.

The following table shows the distribution:—

**ALIENATION AND OCCUPATION OF CROWN LANDS : TASMANIA,  
30th JUNE, 1957.  
(Acres.)**

Particulars.	Area.	Particulars.	Area.
1. <i>Alienated</i> .. .. .	6,328,500	3. <i>Leases and Licences</i> —continued.	
2. <i>In Process of Alienation</i> .. .. .	314,986	(i) Issued by Lands Department—continued.	
3. <i>Leases and Licences</i> —		Soldier Settlement .. .. .	60,650
(i) Issued by Lands Department—		Short-term Leases .. .. .	839
Islands .. .. .	94,766	(ii) Issued by Mines Department .. .. .	41,579
Ordinary Leased Land .. .. .	1,027,256	<i>Total</i> .. .. .	1,823,192
Land Leased for Timber .. .. .	581,455	4. <i>Area Occupied by the Crown or Unoccupied</i> .. .. .	8,311,322
Closer Settlement .. .. .	16,647	5. <i>Total Area of State</i> .. .. .	16,788,000

8. **Northern Territory.**—The area of the Northern Territory is 335,116,800 acres, of which, at 30th June, 1957, only 0.1 per cent. was alienated; 52.8 per cent. was held under leases and licences; 14.3 per cent. was reserved for aboriginal, defence and public requirements; and the remaining 32.8 per cent. was unoccupied and unreserved.

The following shows the mode of occupancy of areas at 30th June, 1957:—Alienated, 376,562 acres; leased—pastoral leases, 139,296,115 acres, other leases, licences and mission stations, 37,731,557 acres, total leased, 177,027,672 acres; reserved for aboriginal, defence and public requirements, 47,927,661 acres; unoccupied and unreserved, 109,784,905 acres; total, 335,116,800 acres.

9. **Australian Capital Territory.**—Alienated land of the Territory (excluding the Jervis Bay area) at the end of 1957 comprised 11.3 per cent. of the total area; land in process of alienation 7.1 per cent; land held under lease and licence 49.8 per cent; land otherwise occupied, including city tenures, 8.1 per cent.; and unoccupied 23.7 per cent.

The following are the particulars of land areas in the Australian Capital Territory at the end of 1957:—Alienated 65,857 acres; in process of alienation 41,224 acres; leased—City area leases, 4,638 acres; grazing, agricultural, etc., leases, 274,360 acres; grazing licences, 11,100 acres; total leased, 290,098 acres; otherwise occupied, 17,504 acres; unoccupied, 138,117 acres; total, 582,800 acres. Including the Jervis Bay area of 18,000 acres—6,266 acres leased and 11,734 acres otherwise occupied—the grand total for the whole Territory is 600,800 acres.

10. **Summary.**—The following table provides a summary for each State and Territory, and for Australia as a whole, of the alienation and occupation of Crown lands in 1957:—

**ALIENATION AND OCCUPATION OF CROWN LANDS, 1957.**

State or Territory.	Private Lands.				Crown Lands.				Total Area.
	Alienated.		In Process of Alienation.		Leased or Licensed.		Other.		
	'000 Acres.	Per Cent.	'000 Acres.	Per Cent.	'000 Acres.	Per Cent.	'000 Acres.	Per Cent.	
N.S.W.(a) ..	53,008	26.8	12,796	6.5	115,914	58.5	16,319	8.2	198,037
Victoria(b) ..	31,127	55.3	2,226	4.0	8,828	15.7	14,065	25.0	56,246
Queensland(b)	25,236	5.9	2,517	0.6	364,069	84.8	37,298	8.7	429,120
S. Aust.(a) ..	15,206	6.3	507	0.2	139,727	57.4	87,805	36.1	243,245
W. Aust.(b) ..	25,727	4.1	12,837	2.1	216,811	34.7	369,213	59.1	624,588
Tasmania(a) ..	6,329	37.7	315	1.9	1,823	10.9	8,311	49.5	16,778
Nor. Terr.(a) ..	376	0.1	..	..	177,028	52.8	157,713	47.1	335,117
A.C.T.(b)(c) ..	66	11.0	41	6.8	296	49.3	198	32.9	601
Australia ..	157,075	8.3	31,239	1.6	1,024,496	53.8	690,922	36.3	1,903,732

(a) At 30th June.

(b) At 31st December.

(c) Includes Jervis Bay area.

A diagram showing in graphical form the areas alienated from the State, those in process of alienation under the various systems of deferred payments, the areas held under leases or licences and the areas left unoccupied was included in earlier issues of the Official Year Book (see No. 41, page 73), but is not reprinted in this issue.

## CHAPTER V.

## THE TERRITORIES OF AUSTRALIA.

NOTE.—The internal Territories of Australia are the Northern Territory and the Australian Capital Territory. External Territories under the control of Australia are:—Norfolk Island; Papua (formerly British New Guinea); the Territory of New Guinea (under Trusteeship Agreement with the United Nations); Nauru (under Trusteeship Agreement with the United Nations); the Territory of Heard and McDonald Islands; the Australian Antarctic Territory; the Territory of Ashmore and Cartier Islands; the Territory of Cocos (Keeling) Islands; and the Territory of Christmas Island. Information on all except Ashmore and Cartier Islands is contained in the following pages, and details of the acquisition of all the Territories will be found on pages 5, 23 and 24 of Chapter 1.

## THE NORTHERN TERRITORY.

## § 1. Area and Population.

1. Area.—Upon the extension of New South Wales westward to the 129th east meridian in 1825, the Northern Territory was incorporated in that colony, but in 1863 it was annexed by Royal Letters Patent to the province of South Australia. With the adjacent islands, it was transferred to the Commonwealth on 1st January, 1911. The total area is 523,620 square miles.

2. Population.—(i) *Population excluding Full-blood Aboriginals.* At the Census of 30th June, 1954, the population of the Northern Territory, excluding full-blood aboriginals, was 10,288 males, 6,181 females, 16,469 persons. Corresponding figures at the Census of 30th June, 1947, were 7,378, 3,490 and 10,868 respectively. The estimated population, excluding full-blood aboriginals, at 30th June, 1957, was 19,170 persons.

The European population of the Northern Territory increased slowly from 670 at the Census of 1881 to 3,767 in 1918. By 1921, it had decreased to 2,458, and in 1933 was still only 3,306. At the Census of 1947, it had risen to 9,116, an increase of 176 per cent. on the 1933 figures, while at the Census of 1954 it had risen a further 54 per cent. to 14,028.

Although at one time there were more than 4,000 Chinese in the Territory, at 30th June, 1954, there were only 325, and these comprised the major proportion of the 486 full-blood non-European inhabitants, excluding Australian aboriginals, at that date.

The half-caste population recorded at the Census of 1954 numbered 1,955, of whom 1,659 were half-caste Australian aboriginals. Corresponding figures at the 1947 Census were 1,364 and 1,247 respectively.

(ii) *The Aboriginals.* The total number of full-blooded aboriginals at 30th June, 1957, was estimated at 16,165, of whom approximately 3,840 were in regular employment. The Aboriginals Ordinance was replaced by the Welfare Ordinance which came into operation on 11th May, 1957. Under the Aboriginals Ordinance all aboriginals were, as a race, deprived of citizenship rights and could only attain them by individual exemption from the legislation. The Welfare Ordinance recognizes that, from birth, they are Australian citizens, and temporarily deprives of full citizen rights only those who are committed by name as wards of the State under processes laid down by law. Such committal is subject to the right of individual appeal. This is the same basic idea that is expressed in social legislation applying to those members of the white community who are not able to look after themselves or who have to be protected (e.g., neglected children). Aboriginal reserves comprise an area of 69,458 square miles. (*See also* Chapter IX.—Population.)

## § 2. Legislation and Administration.

On 1st January, 1911, the Territory was transferred from South Australia to the Commonwealth. The terms were outlined in Official Year Book No. 15, page 940. For particulars of the administration up to the Northern Territory (Administration) Act 1931, by which it was for the second time placed in the hands of an Administrator, *see* Official Year Book No. 38 and earlier issues.

The Northern Territory (Administration) Act 1947 provides for the constitution of a Legislative Council. The Council, consisting of the Administrator as President, seven official and six elected members, makes ordinances for the Territory, which must be submitted to the Administrator for assent. The Administrator may, or may not, assent to them, or he may reserve them for the Governor-General. The Governor-General may disallow any ordinance assented to by the Administrator within six months from the date of assent, and the operation of ordinances relating to certain matters including Crown Lands and aboriginal affairs is dependent on his approval. Money votes may be proposed in the Council only by the Administrator himself, or by his permission or direction.

The Territory elects a member to the House of Representatives, who has the right to take part in debates but not to vote.

### § 3. Physiography.

1. **Tropical Nature of the Country.**—The Territory is within the torrid zone, with the exception of a strip 2½ degrees wide which lies south of the Tropic of Capricorn.

2. **Contour and Physical Characteristics.**—The low flat coast-line seldom reaches a height of 100 feet. Sandy beaches and mud flats, thickly fringed with mangroves, prevail. Sandstone, marl and laterite form the occasional cliffy headlands. The sea frontage of more than 1,000 miles is indented by bays and inlets and intersected by numerous rivers, many of which are navigable for considerable distances from their estuaries. The only practicable deep-water port, however, is Darwin.

Inland, the country generally is destitute of conspicuous landmarks. From the coast, there is a general rise southwards to the vicinity of the 17th or 18th parallel of south latitude, where the higher lands form the watershed between the rivers that flow northwards to the sea and those that form the scanty supply for the interior systems. Towards the centre of the continent, the land over a wide area is of considerable elevation, and there are several mountain ranges, generally with an east and west trend.

### § 4. Climate, Fauna and Flora.

1. **The Seasons.**—There are two main climatic divisions, the wet season, November to April, and the dry season, May to October, with uniform and regular changes of weather. Nearly the whole of the rainfall occurs in the summer months. Further particulars appear in Official Year Book No. 6, page 1116.

2. **Fauna.**—The ordinary types of native Australian fauna inhabit the Territory. As elsewhere on the continent, the higher *Theria* are rare, but marsupials, birds, crocodiles, fresh-water tortoises, snakes (mostly non-venomous) and frogs abound. There are many varieties of fresh-water fish and littoral mollusca. Butterflies and beetles are strongly represented. The termite is a pest which is capable of serious damage to wooden buildings unless special preventative measures are taken. A species of the ant builds anthills which sometimes attain great dimensions. Mosquitoes and sandflies are very troublesome, particularly in the wet season. Some types of native fauna are protected. Buffalo formerly existed in large herds, but their number has been greatly reduced by indiscriminate shooting. Buffalo shooting is now controlled by Ordinance.

3. **Flora.**—The vegetation is North Australian in type, but a number of the forms belong to the Malayan and Oceanic regions. The timber trees are not of great commercial value, but in the coastal regions tropical vegetation grows luxuriantly to the water's edge. In the north, cypress pine, bloodwood and paperbark timbers are now cut and milled for local building purposes. These three timbers are resistant to termites. On the wide expanses of plain country in the interior there is little vegetation, the principal orders represented being:—*Euphorbiaceae*, *Compositae*, *Convolvulaceae*, *Rubiaceae*, *Goodeniaceae*, *Leguminosae*, *Utricaceae*.

### § 5. Production.

1. **Agriculture.**—Up to the present, agriculture has made little progress in the Territory, although rice, peanuts, tobacco, grain sorghum, bananas, pineapples, citrus, mangoes, papaws, vegetables, fodder plants and improved pastures can be grown in certain areas. At the present time, commercial agricultural production is practically confined to peanuts, which have been an export crop for some time, and vegetables and small-scale fruit production (mainly pineapple and citrus) for local consumption.

In 1946, the Commonwealth Scientific and Industrial Research Organization commenced scientific surveys to define more accurately the potentialities of the Territory. Surveys

have been completed of the Katherine-Darwin, Barkly Tablelands and Victoria River Regions. The survey of the Katherine-Darwin Region indicated that further investigations into agricultural possibilities were warranted. As a result, the Commonwealth Scientific and Industrial Research Organization established an agricultural research station at Katherine to investigate the possibilities of dry farming in a land system covering an area of about 7,000 square miles in the Katherine-Daly River basin. The research work at this station was sufficiently encouraging in respect of the production of peanuts, grain sorghum, and pastures to warrant investigations into the application of the findings on a commercial scale. To further the investigations, the Commonwealth Government approved of the establishment by the Northern Territory Administration in 1952 of an experimental farm at Katherine for the purpose of carrying out trials with these crops to determine the requirements for farming them on a commercial scale. The trials are in progress but it is too early to make any pronouncements. In 1956, the Administration established an experimental farm at Berrimah, near Darwin. Investigations into fruit and vegetable growing and pasture production are being carried out under both dryland and irrigated conditions.

The survey of the Katherine-Darwin Region also indicated various soil types in other parts of the Region on which agricultural production tests would be worthwhile. In order to carry out these tests economically and quickly, the Administration, in 1952, organized a mobile unit for the purpose of conducting trials on five soil types with pineapples, peanuts, sorghum, tobacco and other crops. This type of trial is now carried out by agricultural field officers of the Administration in various areas of the Territory considered potentially suitable for agriculture.

Prospects for rice growing were indicated by the survey and, in 1952, the Administration established rice research stations at Humpty Doo and at a location known as Sixty Mile, on the Stuart Highway, 60 miles from Darwin. Because of flooding difficulties in the wet season, rice quarantine for the Northern Territory is carried out by the C.S.I.R.O. at the Kimberley Research Station, Western Australia. At the rice research stations, it has been demonstrated that rice can be grown in the Territory but that the main problems are adequate water control and drainage, determination of cultivation techniques in the soil conditions and the production of suitable rice varieties. Since the 1954-55 season, Territory Rice Limited, a firm with Australian and American capital, has been conducting large-scale trials near Humpty Doo to prove its theory that commercial production of rice is possible on the sub-coastal plains of the Territory.

**2. Pastoral Industry.**—The pastoral possibilities of certain parts of the Northern Territory were recognized at an early date, and in 1866 stock were brought into the Macdonnell Range country from South Australia. Six years later, cattle were moved from Queensland to the northern parts of the Territory, and in 1879 Giles reached the Katherine River with 2,000 head of cattle and 12,000 sheep from South Australia. For various reasons sheep-raising did not succeed. The cattle industry, however, progressed steadily and the expansion of the industry is continuing.

Cattle exported during 1956-57 numbered 135,988—76,528 to Queensland, 55,808 to South Australia and 3,652 to Western Australia—170 horses were also exported. Importations of livestock were—Bulls, 874; other cattle, 18,456; stallions, three; other horses, 151; rams, 26; other sheep, 1,825; and pigs, 10.

The estimated numbers of livestock in the Territory at the end of the years 1952 to 1955 and at June, 1957 are given in the table hereunder:—

#### NORTHERN TERRITORY: LIVESTOCK.

31st December—		Horses.	Cattle.	Sheep.	Pigs.	Goats.	Camels.	Donkeys.	Mules.
1952	..	34,645	935,602	33,773	799	11,861	100	873	546
1953	..	36,985	966,033	31,232	1,132	12,502	53	1,475	626
1954	..	33,035	968,755	28,644	911	11,152	50	661	364
1955	..	37,306	1,027,819	33,249	1,076	12,273	59	755	363
1957 (a)	..	38,180	1,175,997	30,466	755	11,189	51	450	286

(a) 30th June. No figures available for 31st December, 1956.

**3. Hides and Skins.**—The numbers of hides and skins exported from the Northern Territory during 1956-57 were as follows: buffalo, 1,482; sheep, 1,408; crocodile, 229; and cattle, 4,063. Kangaroo skins also were exported, but details are not available.

4. **Mining.**—Alluvial gold mining in the Northern Territory commenced in 1869 and in 1881 the yearly return was valued at £111,945. The value of minerals produced in the Territory in 1957 amounted to £2,464,000 compared with £2,789,000 in the previous year. Gold, which in the past has always returned the highest value of mineral production, was surpassed by copper in 1956. The total value of copper production in 1957 was £1,424,000, most of which was won at Tennant Creek, where at one mine, production is concentrated on copper with gold as a by-product.

The value of gold production decreased, most of the ore also being obtained from Tennant Creek. The ore is treated by plant at the mine. The value of wolfram production decreased substantially. The Harts Range Mica Field continues to produce the bulk of Australian high grade mica. The production of tin concentrates increased.

Uranium minerals were first discovered at Rum Jungle in September, 1949, and other deposits have been found since. Continued interest in uranium mining is being shown by Australian and oversea mining companies. The first full-scale uranium treatment plant was opened at Rum Jungle in 1954, and continuous production of uranium oxide is now being achieved. During 1956–57, a substantial quantity of pitchblende was produced from mines on the Alligator River and exported. The production of manganese was first reported during 1955, and is being mined for use at the Rum Jungle treatment plant.

The following table shows the value of mineral production for the years 1953 to 1957:—

**NORTHERN TERRITORY: VALUE OF MINERAL PRODUCTION.**  
(£'000.)

Year.	Gold.	Tin Concentrates.	Copper Ore.	Mica.	Wolfram.	Total All Minerals. (a)
1953 .. ..	820	15	18	102	267	1,221
1954 .. ..	839	13	114	124	54	1,145
1955 .. ..	866	3	611	65	118	1,691
1956 .. ..	996	1	1,579	42	141	2,789
1957 .. ..	898	8	1,424	47	41	2,464

(a) Excludes uranium. Includes small quantities of other minerals produced.

5. **Pearl and Other Fisheries.**—In 1884, mother-of-pearl-shell was discovered in the harbour of Port Darwin. Since that time, the areas fished have extended to the various banks to seaward and coastwise along the Northern Territory coast. Figures for production and value of shell for the seasons 1952–53 to 1956–57 are shown in the following table:—

**NORTHERN TERRITORY: PEARL FISHING.**

Season.	Boats Engaged.	Pearl-shell Taken.	
		Quantity. ('000 lb.)	Value. (£'000.)
1952–53 .. ..	7	260	59
1953–54 .. ..	10	371	95
1954–55 .. ..	9	343	89
1955–56 .. ..	10	311	74
1956–57 .. ..	10	585	146

The price of shell remains high, £576 a ton for good grade shell being the average for 1956–57.

## § 6. Land Tenure.

1. **General.**—A description of the system of land tenure in force in the Territory in 1928 is given in Official Year Book No. 22, Chapter V.—Land Tenure and Settlement. It was revised in Official Year Book No. 39, pages 329–30, and Chapter IV.—Land Tenure and Settlement of this issue contains up-to-date statistical information on the subject.

Almost half the land in the Northern Territory is reserved, or unoccupied and unreserved, the remainder, apart from a very small proportion alienated, being held under various forms of lease and licence, which are described briefly below and in more detail in Official Year Book No. 39, pages 329–30.

2. Pastoral, Agricultural, etc., Leases.—*Pastoral Leases*—granted for periods not exceeding 50 years.

*Pastoral Homestead Leases*—granted in perpetuity but available only to persons who intend to reside *bona fide* on the leased land. Companies are not eligible to hold this type of lease.

*Agricultural Leases*—granted in perpetuity, with area for any one lease limited according to type of farm (Cultivation Farms, Class 1, 1,280 acres, Class 2, 2,560 acres; Mixed Farming and Grazing, Class 1, 12,800 acres, Class 2, 38,400 acres).

*Leases of Town Lands*—except in Darwin, granted in perpetuity (in Darwin granted for periods up to 99 years).

*Special Purpose Leases*—granted for periods up to 99 years, for purposes other than pastoral, agricultural or mining, or private residential purposes within a town.

*Agricultural Development Leases*—granted for periods up to 30 years for the purpose of large scale agricultural development.

*Church Lands Leases*—granted for church purposes at a nominal rental in perpetuity.

*Leases to Aborigines*—granted for areas not exceeding 160 acres each for any period of years upon such terms and conditions as thought fit.

*Leases to Mission Organizations*—granted for periods up to 21 years.

*Miscellaneous Leases*—granted for any prescribed or approved purpose, for periods not exceeding 21 years.

*Grazing Licences*—granted to graze stock on Crown lands for periods not exceeding one year.

*Occupation Licences*—granted for manufacturing, industrial or any prescribed purposes, for periods not exceeding 5 years.

*Miscellaneous Licences*—granted for periods not exceeding 12 months.

The foregoing leases and licences are granted at specified rentals or rentals fixed by the Administrator and subject to re-appraisal, and under various prescribed or specified conditions.

3. Mining Leases, etc.—*Holdings under Miners' Rights*—entitling holder, for a fee of 5s. for 12 months from date of issue, to take possession of and occupy Crown lands for mining purposes.

*Gold-mining Leases*—granted for a period of 21 years, renewable for further periods of 21 years, for areas not exceeding 20 acres each, at an annual rental of 2s. an acre and with payment of a royalty of 3d. in the £1 on the value of gold won, or 6d. in the £1 if on Aboriginal Reserves.

*Mineral Leases*—granted in blocks not exceeding 40 acres each, at an annual rental of 1s. an acre, with term, renewal, and royalty conditions as for gold-mining leases.

*Dredging Claims*—granted for gold or minerals claims, the area not exceeding 300 acres each, at an annual rental of 2s. an acre and with payment of a royalty of 6d. in the £1 on the value of minerals won if on Aboriginal Reserves.

*Petroleum Prospecting Permits*—granted to search for oil over one, two or three areas not exceeding in the aggregate 10,000 square miles for an initial term not exceeding 12 months with provision for extensions in three-year periods up to a maximum of 10 years. The permittee must lodge a fee of £100 and enter into a bond for at least £1,000 to comply with the conditions of the permit and the provisions of the Petroleum (Prospecting and Mining) Ordinances 1954 and the regulations thereunder.

*Petroleum Licences*—confer an exclusive right to carry out the detailed surveys and other operations necessary to test the land for petroleum. A licence is granted only to a permittee for a fee of £20 over an area not exceeding 2,500 square miles upon the permittee entering into a bond of at least £5,000 to comply with the provisions of the licence and the Ordinance and Regulations.

*Petroleum Leases*—granted only to a licensee for a period of 21 years, and renewable for further periods of 21 years, in respect of an area not exceeding 500 square miles. The lessee is required to pay a royalty of 10 per cent. upon the gross value of all crude oil produced.

*Coal Licences*—granted to search for coal over an area not exceeding 1,000 square miles for a period of five years, at an annual fee of £10.

*Coal Leases*—granted for a period of 21 years, renewable for 21 years at an annual rental of 1s. an acre and a royalty fixed by regulation.

*Business and Residence Areas*—granted at the prescribed fee, authorizing the holder to occupy on a gold or mineral field an area not exceeding one acre for residence and carrying on business (one-quarter of an acre if for residence only).

*Garden Areas*—granted under prescribed conditions, on a gold or mineral field for growing fruit or other garden produce, the area of each garden not exceeding 5 acres.

There are various conditions regarding working, employment and value of machinery used, which apply to the foregoing leases and licences.

### § 7. Trade, Transport and Communication.

1. **Trade.**—No record is kept of the trade between the States and the Territory. In the post-war years 1945–46 to 1948–49, direct oversea imports averaged about £200,000 a year, but in the four years 1950–51 to 1953–54, the average was about £625,000 a year. Imports totalled £1,004,243 in 1956–57 and £1,088,697 in 1957–58, while direct oversea exports amounted to £612,051 in 1956–57 and £655,617 in 1957–58.

2. **Shipping.**—Shipping services to Darwin are provided from the eastern States at intervals of about six weeks by ships of the Australian National Line and from Western Australia twice a month by ships of the Western Australian State Shipping Service. Oversea tankers visit Darwin approximately ten times annually with supplies of aircraft fuel and other petroleum products. Other oversea vessels call at irregular intervals. During 1956–57, 65 calls were made by vessels at Darwin, landing approximately 58,000 tons of merchandise and 63,000 tons of petroleum products.

3. **Air Services.**—At 30th June, 1957, there were 25 government aerodromes and 84 licensed aerodromes in the Territory. Darwin, a first class international airport, is the first port of arrival in Australia for virtually all aircraft from Europe and Asia. Qantas Empire Airways Ltd. and British Overseas Airways Corporation operate, through Darwin, a Sydney–Singapore–London passenger and freight service, and Qantas also operates a Sydney–Japan service and a Sydney–Johannesburg service. The Air France service from Paris to New Zealand via Saigon and the K.L.M. and Air India, London–Singapore–Sydney services also call at Darwin. Regular inland services to Darwin with, in some cases, intermediate stops at Territory centres are operated by Trans-Australia Airlines (from Adelaide, Melbourne, Sydney and Brisbane), and MacRobertson-Miller Airways Ltd. (from Perth and Wyndham). MacRobertson-Miller Airways Ltd. and Connellan Airways Ltd. operate a network of air services throughout the Territory, the latter company's base being at Alice Springs. The Royal Flying Doctor Service also operates aircraft, while charter services can be secured at Darwin and Alice Springs.

4. **Railways.**—The Commonwealth Railways Commissioner, under the Commonwealth Railways Act 1917–1957, operates the Central Australia Railway from Port Augusta to Alice Springs over a distance of more than 750 miles, of which about 200 are in the Northern Territory. The Commissioner also operates the North Australian Railway between Darwin and Birdum on a 3 ft. 6 in. gauge over a distance of 316 miles. The two inland terminals, Alice Springs and Birdum, are about 630 miles apart and are connected by road transport along the Stuart Highway. A road-rail passenger and freight service operates between Adelaide and Darwin.

The Clapp plan for the standardization of Australian railways recommended, *inter alia*, the construction of a standard gauge (4 ft. 8½ in.) strategic and developmental railway between Dajarra (Queensland) and Birdum, and the conversion to standard gauge of the Birdum–Darwin line, but not the conversion of the Port Augusta–Alice Springs line nor the construction of a 4 ft. 8½ in. line between Alice Springs and Birdum. Provision for both of the last two projects, however, was included in an agreement with South Australia enacted in 1949.

The Governments of the Commonwealth and South Australia agreed in 1950 that a standard gauge railway from Stirling North to Leigh Creek coalfields (157 miles) should be constructed. A further agreement, in 1954, provided for an extension to Maree, 56 miles north of Leigh Creek. This line was officially opened by the Acting Prime Minister, Sir Arthur Fadden, on 27th July, 1957.

5. **Roads.**—During the war, roads were built connecting Alice Springs with Darwin, and Mount Isa (Queensland) with Tennant Creek. The first of these roads, known as the North–South Road or Stuart Highway, is 954 miles long, and runs via Larrimah and Tennant Creek. The Mount Isa–Tennant Creek Road (Barkly Highway) is 403 miles long and joins the Stuart Highway some 14 miles north of Tennant Creek. Both were used extensively during the war, the Stuart Highway, in particular, experiencing very heavy and continuous traffic. The highways are now used for carrying various freights including cattle, particularly between the railheads at Alice Springs, Birdum and Mount Isa. The routes are used also for overland tourists and travellers from the southern States to

Darwin. With the further development of the pastoral and mining industries in the Territory, road trains are now being used on both highways for the export of cattle and ore. Both roads have good water bores and communications. There are now approximately 12,000 miles of road in the Territory of which 1,325 miles are sealed.

6. Posts, Telegraphs, Telephones and Wireless.—Postal communication is maintained by road and rail transport between Darwin and the capital cities of Australia. In addition, vessels belonging to the Western Australian State Shipping Service give a regular service between Fremantle and Darwin. Mail is also carried between the capital cities of Australia and Darwin by the airway companies operating in each State. Inland, the northern part of the Territory receives its mail via Darwin or by means of the aerial services, and the southern districts are served via Adelaide.

The transcontinental telegraph line, covering a length of 2,230 miles, runs in a northerly direction from Adelaide to Darwin, and links Darwin in telegraphic communication with other parts of the world.

Long-distance telephone communication is established between Darwin and the capital cities of Australia, and oversea telephone communication through Sydney is also available.

Regional national broadcasting stations are situated at Darwin and Alice Springs. The majority of homesteads on pastoral leases are equipped with pedal wireless sets operated under licence from the Postmaster-General's Department. These stations are in daily communication with Flying Doctor Bases situated at Alice Springs (Northern Territory), Wyndham (Western Australia) and Cloncurry (Queensland), and are used for transmission of radio-telegrams and other communications.

## § 8. Education.

1. European.—Schools for European and part-European children in the Northern Territory are conducted for the Commonwealth on an agreed basis of reimbursement by the South Australian Department of Education which is represented in Darwin by an Assistant Supervisor of Education, Northern Territory Schools.

At 30th June, 1957, there were 10 Government schools for European children in the Northern Territory, with 2,519 pupils, providing instruction according to the South Australian curriculum. Classes up to the Leaving Certificate are provided at Alice Springs and at Darwin there is a separate High School with classes up to the Leaving Certificate.

Children of primary and pre-Intermediate secondary standard who live more than 10 miles from an established school receive an allowance of £80 per annum plus fare concessions if they board away from home in order to attend school. Nine exhibitions are available annually on the results of the Intermediate Certificate, the maximum benefits being £110 per annum and annual return fares if the recipients are required to board away from home in order to attend school.

Approximately 140 children receive correspondence education under the South Australian Correspondence School system. The "School of the Air" supplements normal correspondence instruction for certain children. Some of these live as much as 500 miles distant from Alice Springs, from which point the "School of the Air" is conducted. Three half-hourly sessions are given each day and a unique feature of the "School of the Air" is the "Question and Answer" section which forms a part of every session. Children with access to radio transceivers are able to ask questions of their teacher and all other pupils listen to the answers. One session a week is for pre-school children.

Seven pre-school centres have been established in the Territory. Of these, four reach the required standards for subsidy by the Administration of the amount of the salary of a trained pre-school teacher. Two centres occupy buildings specially erected for the purpose at the expense of the Administration, and a third centre occupies a building purchased by the Administration. Two scholarships are offered each year for Territory girls to qualify as pre-school teachers.

2. Native.—The social, cultural and educational background of the aboriginals has made necessary the establishment of special schools for them. It is envisaged that this necessity will ultimately pass. As from the beginning of the 1956 school year, control of these schools passed from the Commonwealth Office of Education to the Welfare Branch of the Administration. Fifteen have so far been established. A special syllabus and series of readers have been prepared for use in these schools. Free mid-day meals, milk

and school clothes are supplied to the pupils. In addition to the 15 Administration schools, 13 schools for aboriginal children are conducted by Missions with the aid of Government subsidies. Three schools, also aided by Government subsidies, have been established on pastoral properties and the establishment of others along similar lines is planned.

3. **Theoretical Training of Apprentices.**—The recognition that technical school training is an extension of workshop training has led to the introduction of day-time classes which apprentices attend without loss of pay. Apprentices are directed by the Apprentices Board to undertake correspondence courses conducted by the Technical Correspondence School of the South Australian Education Department and the Sydney Technical College, these courses covering the work prescribed for the various trades in South Australia and New South Wales.

### § 9. Native Welfare.

The Welfare Ordinance, which came into operation on 13th May, 1957, established the principle that native people would be committed to the care of the State only on the grounds of their need for special care and assistance and not on the grounds of race or colour, and it laid on the Director of Welfare a positive responsibility for the advancement of wards in his care. The Employment Ordinance provides for the training of wards and assistance in establishing them in occupations, either on their own account or as employees. The Ordinance envisages, amongst other forms of training, apprenticeships for the better-educated wards and training on the job for those wards not yet capable of entering into apprenticeships. It also envisages financial aid to natives or groups of natives who may, under the guidance of the Director, be able to engage in activities (for example in agriculture, cattle raising, hunting or fishing) on their own behalf. The Director of Welfare is responsible for supervising employment for the wards in his care, and protective legislation for those in employment is retained. The legislation does not, of course, apply to any persons who are not wards and native people who have ceased to be wards will come within the normal industrial customs of the country.

### § 10. Finance.

Details of revenue and expenditure of the Territory for the years 1952–53 to 1956–57 are shown below. The information given covers the transactions of the Commonwealth Consolidated Revenue Fund relating to the Northern Territory and the transactions of the North Australia Railway.

#### NORTHERN TERRITORY: REVENUE AND EXPENDITURE. (£.)

Item.	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.
REVENUE.					
<i>Taxation—</i>					
Probate and Stamp Duties ..	5,565	6,292	9,928	7,765	10,499
Motor Registration ..	11,354	25,882	36,694	41,528	42,994
<i>Total</i> .. ..	<i>16,919</i>	<i>32,174</i>	<i>46,622</i>	<i>49,293</i>	<i>53,493</i>
<i>Business Undertakings—</i>					
North Australia Railway ..	42,160	68,411	69,494	85,559	130,083
Electricity Supply ..	260,521	259,687	264,969	311,158	375,207
<i>Total</i> .. ..	<i>302,681</i>	<i>328,098</i>	<i>334,463</i>	<i>396,717</i>	<i>505,290</i>
<i>Other—</i>					
Rent and Rates .. ..	115,758	127,852	143,152	187,068	210,356
Miscellaneous .. ..	177,839	227,110	188,169	189,064	268,159
<i>Total</i> .. ..	<i>293,597</i>	<i>354,962</i>	<i>331,321</i>	<i>376,132</i>	<i>478,515</i>
<b>Grand Total</b> .. ..	<b>613,197</b>	<b>715,234</b>	<b>712,406</b>	<b>822,142</b>	<b>1,037,298</b>

NORTHERN TERRITORY : REVENUE AND EXPENDITURE—*continued.*

(£.)

Item.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
<b>EXPENDITURE.</b>					
<i>Public Debt Charges—</i>					
Interest(a) ..	126,328	133,866	135,546	124,561	122,489
Debt Redemption(b) ..	65,907	69,194	72,651	76,283	80,096
Other(c) ..	79	..	7,029	..	..
<i>Total</i> .. ..	<i>192,314</i>	<i>203,060</i>	<i>215,226</i>	<i>200,844</i>	<i>202,585</i>
<i>Business Undertakings—</i>					
North Australia Railway ..	114,477	139,324	158,383	183,268	238,750
Electricity Supply ..	266,614	268,307	275,423	282,976	300,961
Water Supply ..	71,104	73,495	64,736	83,959	79,866
Hostels Loss ..	42,653	25,159	31,607	41,849	36,339
<i>Total</i> .. ..	<i>494,848</i>	<i>506,285</i>	<i>530,149</i>	<i>592,052</i>	<i>655,916</i>
<i>Social Expenditure—</i>					
Aboriginal Affairs ..	278,492	354,266	413,833	421,412	508,743
Educational Services ..	95,476	94,578	132,311	131,548	160,815
Public Health, Recreation and Charitable ..	508,166	547,680	586,158	668,835	751,766
Law, Order and Public Safety	35,063	32,738	48,520	52,291	63,567
<i>Total</i> .. ..	<i>917,197</i>	<i>1,029,262</i>	<i>1,180,822</i>	<i>1,274,086</i>	<i>1,484,891</i>
<i>Capital Works and Services—</i>					
North Australia Railway ..	162,020	229,861	141,529	93,371	79,812
Water Supplies, Roads, Stock Routes, etc. ..	174,780	142,402	115,873	106,344	110,987
Darwin Lands Acquisition ..	56,209	..	..	..	..
Buildings, Works, Sites, etc.	858,459	1,162,146	1,565,381	2,467,573	2,175,099
Plant and Equipment ..	116,707	137,096	137,338	214,117	336,344
Additional Working Account (Northern Territory Ser- vices Trust Account) ..	..	10,000	..	..	..
Loans for housing ..	..	..	..	73,000	176,000
<i>Total</i> .. ..	<i>1,368,175</i>	<i>1,681,505</i>	<i>1,960,121</i>	<i>2,954,405</i>	<i>2,878,242</i>
<i>All Other—</i>					
Territory Administration ..	683,711	735,215	772,476	1,048,967	1,313,044
Developmental Services ..	117,419	140,541	126,797	128,717	148,472
Municipal, Sanitary and Gar- bage Services ..	88,336	81,796	72,866	83,466	71,831
Shipping Subsidy ..	3,800	3,800	3,800	3,800	3,500
Airmail Service Subsidy ..	11,000	11,708	18,300	35,229	35,416
Railway Freight Concessions	22,955	20,367	24,039	20,200	21,280
Rent, Repairs and Mainte- nance, n.e.i. ..	153,608	152,768	178,242	191,528	233,898
<i>Total</i> .. ..	<i>1,080,829</i>	<i>1,146,195</i>	<i>1,196,520</i>	<i>1,511,907</i>	<i>1,827,441</i>
<b>Grand Total</b> ..	<b>4,053,363</b>	<b>4,566,307</b>	<b>5,082,838</b>	<b>6,533,294</b>	<b>7,049,075</b>

(a) Includes North Australia Railway Interest and Exchange, 1952-53, £84,887; 1953-54, £83,633; 1954-55, £86,403; 1955-56, £76,634; 1956-57, £75,906. (b) Includes North Australia Railway Debt Redemption, 1952-53, £38,103; 1953-54, £40,000; 1954-55, £41,997; 1955-56, £44,096; 1956-57, £46,300.

(c) Railways Loan Redemption and Conversion Expenses.

## THE AUSTRALIAN CAPITAL TERRITORY.

1. *Introductory.*—Information regarding the selection and establishment of Canberra as the Australian capital city, the physiography of the Territory and its early history will be found in earlier issues of the Official Year Book—See List of Special Articles, etc., at the end of this volume under “Canberra” and “Federal Capital City”.

On 12th March, 1913, the official ceremony to mark the start of operations in connexion with the establishment of the Seat of Government was carried out. At this ceremony, the selection of “Canberra” as the name of the capital city was announced.

On 9th May, 1927, Parliament House at Canberra was officially opened by His Royal Highness Albert, Duke of York—afterwards His Majesty King George VI.—the occasion being the 26th anniversary of the opening of the first Parliament of the Commonwealth at Melbourne by His Royal Highness George, Duke of Cornwall and York—afterwards His Majesty King George V.—on 9th May, 1901. (For particulars of the opening ceremony see Official Year Book No. 21, p. 604.)

The development of the Territory administration prior to the taking over of control by the Federal Capital Commission on 1st January, 1925, is described in summarized form in Official Year Book No. 18, and in Official Year Book No. 22 a summary is given of the administrative activities of the Federal Capital Commission. The administration of the Territory by this authority was continued until 30th April, 1930, when the Seat of Government (Administration) Act 1924–1929 was repealed, and the powers and functions of the Commission reverted to the Government.

Since April, 1932, the general control of the Territory has been exercised by the Minister for the Interior, certain specific services, however, being undertaken by the Department of Health, the Department of Works and the Attorney-General's Department.

An amendment to the Seat of Government Acceptance Act in 1938 provides that the Territory shall be known as the Australian Capital Territory.

2. *Progress of Work.*—(i) *General.* Further progress in providing housing and allied community facilities was shown in the works programme in the Australian Capital Territory for the financial year 1957–58 and engineering services were kept abreast of developmental requirements. Planning was continued for the increase in population which will result from transferring other Departments to Canberra as the various sections of the new administrative building are completed.

The total expenditure on capital and maintenance works in the works programme amounted to £9,041,958 in 1957–58.

The combined labour force of the Department of Works and contractors working for the Department totalled 3,123 men at 30th June, 1958.

(ii) *Works Programme.* (a) *Housing.* During 1957–58, 556 dwelling units were completed (546 built by contract and 10 by day labour). The number of houses of each type completed was as follows:—Brick 212, brick veneer 165, brick flats 36, timber 7 and monocrete 136. Of the total units built, 139 were built in the suburb of O'Connor, 103 in Braddon, 89 in Griffith, 56 in Ainslie, 50 in Yarralumla, 41 in Narrabundah and 26 in Kingston. The remaining 52 were built in Deakin, Campbell, Dickson, Forrest, Lyneham and at the Cotter River. More than 98 per cent. of the units built were for the Department of the Interior. At 30th June, 1958, there were 788 houses and 216 flats under construction.

(b) *Other Building.* Major projects completed during the year 1957–58 included primary schools at Forrest, Griffith, North Ainslie and Yarralumla, a new sergeants' mess and quarters and a services building at the Royal Military College, Duntroon, Airmen's quarters at the R.A.A.F. Station, Fairbairn, a bitumen hot mix plant for the Department of Works, and five constant temperature rooms for the C.S.I.R.O. at Black Mountain.

Further progress was made on the permanent administrative building at Parkes and at 30th June, 1958, its erection was nearing completion. Further progress was also made on the construction of a 20-chamber Hoffman brick kiln at Westridge. At 30th June, 1958, work was well advanced on a new primary school at Lyneham, while the new Lyneham Secondary school was 70 per cent. complete. Other major building works under construction at 30th June, 1958, were the erection of a new office block at Barton, a transport depot and electrical workshops at Kingston, and alterations and additions to chilling halls at the Canberra abattoirs.

(c) *Engineering Works and Services.* During 1957-58, 45 miles of sub-divisional roads were constructed to serve newly built areas bringing the length of city roads at 30th June, 1958, to 282 miles, comprising 3 miles of concrete, 171 miles of bitumen paved and 108 miles of gravel. At the same date, the length of city footpaths was 178 miles. During 1957-58, about 22 miles of city roads were sealed and road maintenance works included the resealing of 11 miles of city roads. Major projects were the completion of four concrete bridges over Sullivan's Creek, reconstruction of Cooma road, Brindabella-Mount Franklin road and Upper Cotter road, and sub-divisional roads in Lyneham, O'Connor, Forrest, Deakin, Barton and Campbell. Other projects carried out were the construction of roads, parking area, etc., at the olympic pool, and the construction of footpaths, kerbs and gutters, and stormwater drains in new sub-divisions being opened up in most Canberra suburbs. Considerable maintenance work and alterations were carried out on all city and country roads.

During 1957-58, 58,118 feet of water mains were laid to reticulate water services to new buildings. At 30th June, 1958, 9,009 houses were connected to the water supply system and of this number 8,906 were metered. The consumption for 1957-58 was 2,510 million gallons with an average daily consumption of about 178 gallons per head.

Construction commenced on the 15" Canberra-Queanbeyan main, Weetangerra Reservoir, and various stormwater drainage and sewerage projects in Canberra suburbs.

Investigational work is being carried out at the site of the proposed new dam on the Upper Cotter River.

During 1957-58, 89,364 feet of sewer mains were laid to connect newly built houses to the sewerage system and 8,727 houses and buildings had been connected to the sewerage system by 30th June, 1958.

Construction of the Northern Suburbs outfall sewer, augmentation of treatment plant at Western Creek and various storm water drainage and sewerage works in Canberra suburbs were completed.

3. *Forestry.*—A considerable amount of reafforestation work has been undertaken and plantations (mainly *Pinus radiata*) have been established at Uriarra, Mount Stromlo, Pierce's Creek, Green Hills and Kowen. Experimental plots have been established in the Brindabella mountains and soil conservation areas at various locations throughout the Territory.

The total area of softwood plantations at 31st December, 1957, was 19,300 acres, of which 17,200 acres were *Pinus radiata*, the balance consisting of other softwood species, chiefly *Pinus ponderosa* and *Pinus nigra*.

Forestry operations in the Territory were begun on Mount Stromlo in 1915. Plantings up to 1925 were chiefly on decorative lines, but since then a much wider programme has been undertaken. Sawmill timber is now being obtained mainly from the logs resulting from thinning operations. The yearly output of pine timber has increased from 30,000 super. feet in 1930-31 to approximately 13 million super. feet at the present time, the total amount cut to date being about 113 million super. feet. The present output consists of approximately 50 per cent. saw log timber producing building material, and 50 per cent. case-making material.

In 1926, a comprehensive review was undertaken of the Territory's potentialities for forest development. A system of forest management was instituted in the existing forest area, and a considerable amount of survey and assessment work has been completed, resulting in the extension of operations, including fire protection, to 100,000 acres of hardwood forests in the Cotter catchment area. Hardwood produced during 1956-57 amounted to 3,000,000 super. feet log measure all of which was used in building operations in Canberra. The total amount of hardwood cut from Australian Capital Territory forests to date is about 36,000,000 super. feet.

4. **Lands.**—(i) *General.* Reference has been made in previous issues of the Official Year Book to the general conditions of land tenure in the Australian Capital Territory and to the area of alienated and leased land, and Chapter IV.—Land Tenure and Settlement, of this issue contains statistical information on the subject.

Under the Seat of Government (Administration) Act 1910, Crown lands in the Territory may not be sold or disposed of for any estate in freehold except in pursuance of some contract entered into before the commencement of that Act. Leases of land in the city area are granted under the City Area Leases Ordinance 1936-1951, and leases of other lands under the Leases Ordinance 1918-1955. Land is also leased for various purposes in the city area under the Church Lands Leases Ordinance 1924-1932 and the Leases (Special Purposes) Ordinance 1925-1943, while one lease under the Church of England Lands Ordinance 1926 has been granted for church purposes.

Under the City Area Leases Ordinance 1936-1951, the Government may grant leases in the city area of any Crown land for business or residential purposes. Such leases may be issued for a period not exceeding 99 years at a rental equal to five per cent. of the unimproved value of the land, which value is subject to re-appraisal at the expiration of 20 years, and thereafter every 20 years. A suitable building must be commenced within six months and completed within 12 months unless an extension of time is allowed.

As considerable portions of the Territory lands are not required in connexion with the establishment of the city, large areas have been leased for agricultural or grazing purposes. Leases may be granted for grazing, dairying, fruitgrowing, horticulture, agriculture or other purposes for periods not exceeding 50 years. The annual rental is 5 per cent. of the assessed value of the land inclusive of rates, the value being subject to re-appraisal every 10 years.

(ii) *Jervis Bay Territory.* The Commonwealth acquired from the State of New South Wales sovereign rights over the area comprising about 28 square miles of land and water at Jervis Bay for possible use as a port in connexion with the Australian Capital Territory. The Royal Australian Naval College was established in this area on a site known as Captain's Point, but was removed in 1930 to Flinders Naval Base, Victoria. It was, however, re-established at the original site as from the beginning of 1958. Some 13,000 acres of land in the Jervis Bay area, mostly of little value agriculturally, have been leased for short terms from time to time, chiefly for grazing purposes. The natural forest is being utilized for hardwood building material to a small extent and the area treated is the subject of reforestation on an experimental basis.

5. **Transport and Communication.**—Canberra is connected with the railway system of New South Wales at Queanbeyan by a line  $4\frac{1}{2}$  miles long. This line was opened for goods traffic on 25th May, 1914, and for passenger traffic on 15th October, 1923. The railway terminus is situated in the suburb of Kingston. A daily passenger service operates between Canberra and Sydney and Canberra and Melbourne.

Two airlines provide several services daily each way on the Sydney-Canberra-Melbourne route.

Regular motor-coach services link Canberra with towns in New South Wales, Victoria and South Australia.

There are three radio broadcasting stations in the Australian Capital Territory, 2CY and 2CN of the national broadcasting system and 2CA, a commercial station.

**6. Population.**—From 1911 until 1921, the population of the Australian Capital Territory remained at about 2,000 persons. In 1922, it commenced to rise, and by 1927 was nearing 6,000. The following year, with the transfer of departments from Melbourne, it passed 8,000.

The population at the Census of 30th June, 1947, was 16,905 persons—15,156 in the city area, 1,389 in the rural districts and 360 in the Jervis Bay area—and at the Census of 30th June, 1954, it was 30,315 persons, 28,277 being in the Canberra city area and 517 in the Jervis Bay area. At 30th June, 1957, when a special count of the Canberra City area was made, the population was 35,827 persons. The estimated population of the Territory at the same date was 37,865 persons, and at 30th June, 1958, it was 41,167.

**7. Production.**—During 1956–57, the production of the more important items of the agricultural and pastoral industry was—Wheat, 723 bushels; wool, 2,457,000 lb.; whole milk, 967,000 gallons; meat (bone-in weight, fresh), 3,304 tons. The numbers of livestock depastured at 31st March, 1957, were—Horses, 745; cattle, 10,596; sheep, 266,896; and pigs, 139.

**8. Education.**—The Commonwealth Department of the Interior is primarily responsible for the education of children in the Australian Capital Territory. The New South Wales Education Department, however, provides teachers and the curriculum for schools in the Territory and is reimbursed annually for expenses incurred.

At 31st December, 1958, there were two public secondary schools in Canberra providing courses to the Leaving Certificate standard, Canberra High School, Acton, and Telopea Park High School, Barton, while fourteen schools provided courses for children in infants and primary classes, including two in the Jervis Bay area and three in rural districts. A school for mentally handicapped children was opened early in 1955.

At the same date there were eight private schools in Canberra. Of these, St. Edmund's Christian Brothers College, St. Christopher's Convent, Canberra Grammar School (Boys) and Canberra Church of England Girls' Grammar School provided courses leading to the Leaving Certificate Examination.

The Australian Capital Territory Education Ordinance provided for the compulsory attendance at school of children between the ages of six and fifteen years.

Eighteen pre-school centres, including an occasional care centre and a mobile unit which visits outlying areas provided pre-school facilities for approximately 1,400 children between the ages of three and five years.

The Canberra Technical College, which follows the curriculum set by the New South Wales Technical Education Department, provided trades courses for apprentices, vocational (non-trades) courses including accountancy, women's handicrafts, and sheep and wool courses, hobbies courses including ceramics, dressmaking, art, woodwork, and motor maintenance, and courses for Commonwealth authorities, including workshop practice for Royal Military College cadets, motor maintenance for Australian Forestry School cadets and shorthand and typing courses for the Public Service Board. In addition, the Technical College undertook the trade testing of migrants seeking to enter skilled trades.

Education at university level was provided by the Canberra University College, details of which will be found in Chapter XV.—Education.

An area of about 250 acres has been set aside at Acton for the Australian National University. Provision has been made for the University to establish such research schools as may be thought desirable, including a School of Medical Research, and Research Schools of Physical Sciences, Social Sciences and Pacific Studies. Further reference to this University appears in § 8 of Chapter XV.—Education.

9. Finance.—Details of revenue and expenditure for the years 1952-53 to 1956-57 as recorded in the Commonwealth Consolidated Revenue Fund are given in the following table:—

**AUSTRALIAN CAPITAL TERRITORY : REVENUE AND EXPENDITURE.**

(£.)

Item.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
<b>REVENUE.</b>					
<i>Taxation—</i>					
Motor Registration .. .. .	41,973	47,998	53,768	79,229	91,198
Liquor .. .. .	21,034	22,756	25,436	26,213	30,174
Rates .. .. .	22,312	30,306	38,333	51,542	63,583
Other .. .. .	1,196	935	1,149	990	402
<i>Total</i> .. .. .	<b>86,515</b>	<b>101,995</b>	<b>118,686</b>	<b>157,974</b>	<b>185,357</b>
<i>Business Undertakings—</i>					
Railways .. .. .	24,493	14,557	29,233	15,168	20,531
Electricity Supply .. .. .	328,108	471,410	510,852	(a)	(a)
Water Supply and Sewerage .. .. .	22,002	25,390	26,706	24,361	27,736
Abattoirs .. .. .	28,706	27,115	29,254	31,410	32,436
<i>Total</i> .. .. .	<b>403,309</b>	<b>538,472</b>	<b>596,045</b>	<b>70,939</b>	<b>80,703</b>
<i>Rent—</i>					
Housing .. .. .	409,915	502,096	556,725	585,940	628,615
Land .. .. .	91,038	110,080	88,150	115,970	146,751
Miscellaneous .. .. .	13,299	16,196	8,473	8,956	9,157
<i>Total</i> .. .. .	<b>514,252</b>	<b>628,372</b>	<b>653,348</b>	<b>710,866</b>	<b>784,523</b>
Interest .. .. .	17,335	22,300	25,032	52,388	(b)
Fees for Services and Fines .. .. .	21,325	21,559	40,273	45,991	65,409
Sale of Houses—Mortgages and Cash Sales .. .. .	128,037	155,596	283,751	361,299	(c)354,189
Other .. .. .	61,619	94,628	88,400	128,260	(c)153,907
<b>Grand Total</b> .. .. .	<b>1,232,392</b>	<b>1,562,922</b>	<b>1,805,535</b>	<b>1,527,717</b>	<b>1,624,088</b>
<b>EXPENDITURE.</b>					
<i>Public Debt Charges—</i>					
Interest .. .. .	172,579	183,086	180,659	180,826	177,527
Debt Redemption .. .. .	85,605	89,884	94,323	99,025	103,960
Other .. .. .	42	..	336	..	..
<i>Total</i> .. .. .	<b>258,226</b>	<b>272,970</b>	<b>275,318</b>	<b>279,851</b>	<b>281,487</b>
<i>Business Undertakings(d)—</i>					
Railways .. .. .	45,802	42,721	39,705	44,530	50,274
Electricity Supply .. .. .	436,271	504,559	542,939	(a)	(a)
Water Supply and Sewerage .. .. .	69,279	83,047	81,642	166,781	195,859
Abattoirs .. .. .	20,310	20,379	20,933	24,782	26,432
Brickworks Loss .. .. .	25,000	30,000	18,000	18,000	..
Transport Services(e) .. .. .	60,000	60,000	64,000	70,000	60,000
Firewood Supplies Loss .. .. .	1,000	1,000	1,000	1,000	1,000
Hostels(f) .. .. .	26,513	33,542	9,075	22,726	22,479
<i>Total</i> .. .. .	<b>684,175</b>	<b>775,248</b>	<b>777,294</b>	<b>347,819</b>	<b>356,044</b>

NOTE.—For notes see end of table, page 124.

## AUSTRALIAN CAPITAL TERRITORY : REVENUE AND EXPENDITURE

—continued.

(£.)

Item.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
<i>EXPENDITURE—continued.</i>					
<i>Social Expenditure(d)—</i>					
<i>Education—</i>					
Primary and Secondary ..	183,356	239,525	296,783	327,162	408,353
Technical College .. ..	39,191	38,490	42,190	47,322	48,692
University .. .. .	60,300	64,882	79,625	113,110	157,009
Science, Art, Research, etc. ..	5,459	5,727	5,691	6,351	6,206
Nursery Schools and Pre-School Centres .. .. .	18,724	18,749	19,624	23,376	25,708
Public Health and Recreation ..	75,369	88,820	89,755	95,314	103,752
<i>Charitable—</i>					
Hospital—General .. .. .	144,733	135,328	141,831	189,211	260,720
Relief of Aged, Indigent, etc. ..	2,739	3,227	3,241	3,427	4,684
Other .. .. .	11,250	14,801	17,225	20,450	22,796
<i>Law, Order and Public Safety—</i>					
Justice .. .. .	17,399	22,467	25,767	26,773	28,999
Police .. .. .	74,492	86,413	87,126	98,720	109,710
Public Safety .. .. .	18,499	20,559	19,658	20,016	26,823
<i>Total</i> .. .. .	<i>651,511</i>	<i>738,988</i>	<i>828,516</i>	<i>971,232</i>	<i>1,203,452</i>
<i>Capital Works and Services(g)—</i>					
<i>Business Undertakings—</i>					
Railways .. .. .	3,166	2,562	7,432	5,948	3,923
Electricity Supply .. .. .	272,038	138,162	160,045	201,988	281,244
Water Supply and Sewerage ..	364,006	408,365	408,781	625,760	932,323
Abattoirs .. .. .	9,856	4,992	9,526	18,827	80,732
Transport Services .. .. .	41,956	18,996	44,191	93,727	22,000
Hostels(h) .. .. .	420	..	..	..	..
Brickworks .. .. .	7,738	21,154	..	..	..
<i>Total</i> .. .. .	<i>699,180</i>	<i>594,231</i>	<i>629,975</i>	<i>946,250</i>	<i>1,320,222</i>
<i>Social Expenditure—</i>					
Primary and Secondary Education	} 169,628	151,192	193,081	284,762	328,131
Technical College .. .. .					
University .. .. .					
Public Health and Recreation					
Hospital—General .. .. .					
Hospital—General .. .. .	66,285	64,674	86,147	26,786	7,345
Police .. .. .	3,238	2,485	..	..	1,943
Public Safety .. .. .	5,528	3,664	8,212	10,342	10,131
<i>Total</i> .. .. .	<i>262,563</i>	<i>245,756</i>	<i>297,749</i>	<i>329,660</i>	<i>356,598</i>
<i>Other—</i>					
Roads and Bridges .. .. .	264,307	208,391	249,980	389,319	471,698
Parks and Gardens, etc. .. ..	26,540	23,927	21,348	34,164	50,963
Lands and Surveys .. .. .	2,509	1,367	1,052	120	185
Forestry .. .. .	33,050	45,871	67,805	72,771	71,777
Housing .. .. .	1,578,790	1,168,499	1,507,204	2,545,520	1,998,157
Civil Aviation .. .. .	(i)	(i)	(i)	12,787	112
Public Works, n.e.i. .. .. .	382,661	356,351	573,934	869,514	690,880
<i>Total Capital Works and Services</i> .. .. .	<i>3,249,600</i>	<i>2,644,393</i>	<i>3,349,047</i>	<i>5,200,105</i>	<i>4,960,592</i>

NOTE.—See next page for notes.

## AUSTRALIAN CAPITAL TERRITORY : REVENUE AND EXPENDITURE

—continued.

(£.)

Item.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
EXPENDITURE—continued.					
<i>All Other—</i>					
Roads and Bridges .. ..	243,480	208,733	199,111	239,748	301,870
Parks and Gardens, etc. ..	204,905	220,008	246,933	252,251	281,173
Lands and Surveys .. ..	43,910	53,125	47,745	54,530	56,323
Agriculture and Pasture ..	19,291	18,386	22,208	22,874	23,714
Forestry .. ..	10,000	7,000	5,000	5,000	..
Housing .. ..	102,220	101,254	121,179	164,584	228,240
Civil Aviation .. ..	(i)	(i)	(i)	24,368	31,345
Legislative and General Administration .. ..	183,442	211,726	266,081	296,385	293,551
Public Works, n.e.i. .. ..	28,093	25,828	30,290	31,543	48,132
Miscellaneous(j) .. ..	79,380	64,036	9,039	43,808	40,581
<i>Total</i> .. ..	<i>914,721</i>	<i>910,096</i>	<i>947,586</i>	<i>1,135,091</i>	<i>1,304,929</i>
<b>Grand Total</b> .. ..	<b>5,758,233</b>	<b>5,341,695</b>	<b>6,177,761</b>	<b>7,934,098</b>	<b>8,106,504</b>

(a) Transactions in Australian Capital Territory Electricity Supply Trust Account. (b) Not available separately. Included in "Sale of Houses" and "Other." (c) Includes interest. (d) Other than Capital Works and Services. (e) Payment to Australian Capital Territory Transport Trust Account (loss on omnibus service). (f) Includes loss on operations, 1952-53, £12,700; 1953-54, £24,000; 1954-55, £7,500; 1955-56, £7,500; and 1956-57, £15,000. (g) Excludes repairs and maintenance. (h) Expenditure on plant and equipment by Department of Interior only. (i) Not available. (j) Includes restoration of bushfire damage, 1952-53, £72,783; 1953-54, £53,701; 1954-55, £3,582; 1955-56, £1,391; and 1956-57, nil.

The following table, which was prepared by the Department of the Interior, shows the total receipts and expenditure of the Australian Capital Territory from 1911-12 to 30th June, 1957:—

**AUSTRALIAN CAPITAL TERRITORY: RECEIPTS AND EXPENDITURE TO  
30th JUNE, 1957.**

Receipts.	£	Expenditure.	£
Commonwealth Treasury—		Lands .. ..	934,085
Parliamentary Appropriations—		Engineering works .. ..	16,881,970
Revenue .. ..	56,811,038	Architectural works .. ..	22,166,310
Loan .. ..	5,693,340	Other capital expenditure, sundry debtors, etc. .. ..	5,860,798
		Seat of Government Establishment Account, being maintenance and administration less revenue; expenditure of a capital nature for which assets no longer exist; profit and loss accounts of trading activities, etc. .. ..	a 16,661,215
<b>Total Receipts</b> .. ..	<b>62,504,378</b>	<b>Net Expenditure</b> .. ..	<b>62,504,378</b>

(a) Excludes interest £6,093,048.

The foregoing figures exclude part cost of national buildings (Parliament House, the Secretariats, etc.), federal highways within the Territory, the Queanbeyan-Canberra Railway, the housing loan, etc.

## NORFOLK ISLAND.

1. **Area, Location, etc.**—Norfolk Island, discovered by Captain Cook in 1774, is situated in latitude  $29^{\circ} 3' 30''$  S, longitude  $167^{\circ} 57' 5''$  E. Its total area is 8,528 acres, the island being about 5 miles long and 3 miles wide. From Sydney, it is distant 930 miles, and from Auckland, 660 miles. The length of the coast line is 20 miles, and its form that of an irregular ellipse. Except for a portion on the south side and the landing place at Cascade on the northern side, almost inaccessible cliffs rise from the water's edge. The climate is equable, the temperature ranging between  $49^{\circ}$  and  $85^{\circ}$  F. with a mean of  $68^{\circ}$  F. The average annual rainfall is 53 inches. It has been said that the healthy climate together with the beauty of its landscapes and seascapes, should make Norfolk Island "the Madeira of the Pacific". The island, both pre-war and post-war, has been popular as a tourist resort. Pre-war the only means of transport to the island was by ship. However, with the inauguration of direct air services from Australia and New Zealand the majority of tourists now take advantage of these services.

2. **Settlement and Population.**—The first colonization, in 1788, was by Lieutenant King, who in H.M.S. *Supply* established a small penal station as a branch settlement of that at Port Jackson. The settlement was abandoned in 1813 and for 13 years thereafter its chief use was as a whaling station and place of call for British warships.

From 1826 to 1855, it was again a penal station. In 1844, it was annexed to Van Diemen's Land (Tasmania).

The descendants of the *Bounty* mutineers, having become too numerous to subsist on Pitcairn Island, were removed to Norfolk Island in 1856. The new community, numbering 94 males and 100 females, were the descendants of British sailors and Tahitian women. The last of those transferred died at Norfolk Island on 1st March, 1943. The population of the island as disclosed by the Census of 30th June, 1954, was 942, consisting of 478 males and 464 females. The estimated population at 30th June, 1957, was 1,060 persons.

3. **Administration.**—In 1856, the island was created a distinct and separate settlement under the jurisdiction of New South Wales. In 1896, it was made a dependency under the Governor of that Colony, and finally, by the passage of the Norfolk Island Act 1913, it was accepted by the Federal Parliament as a territory of Australia. From July, 1914, until 1st January, 1929, Norfolk Island was administered by the Department of Home and Territories, and then, until 25th June, 1941, by the Territories Branch of the Prime Minister's Department, but it is now controlled by the Minister for Territories through an Administrator. An amending measure, the Norfolk Island Act 1935, provided for the establishment of an Advisory Council of eight elected members which may advise the Administrator on matters affecting Norfolk Island.

4. **Economic Activity.**—The major economic activities of the island are primary production, whaling, the tourist trade and employment by Government instrumentalities.

(i) **Primary Industries.** The soil on the island is particularly fertile, the climate equable, and the rainfall fairly evenly distributed except for a pronounced dry period in November. This enables a wide range of temperate and semi-tropical products to be cultivated. However, the island's comparative isolation and trading difficulties with New Zealand have hampered production in the past. A relaxation of some restrictions enabled out-of-season fruit and vegetables up to a limit of 3,000 lb. a week to be sent by air freight to Auckland, but the air service was reduced to fortnightly from August, 1956.

Prior to 1939, the principal primary product was passion fruit pulp. However, the introduction of disease, together with the high cost of trellising and land reclamation, has led to the curtailment of this industry. The production of bean seed has now become the main export industry. The island's isolation from many plant diseases found on the mainland, plus the fairly reliable dry period (which is conducive to the setting and maturing of seed), together with improved prices, induced a rapid expansion of production. In 1956–57, 2,680 bushels were exported and prices ranged from £8 5s. to £11 15s. a bushel. The conditions on Norfolk Island also favour the production of other types of seed. Some cut flowers are exported to New Zealand at suitable periods.

Island conditions are also conducive to good pasture growth but, for a number of reasons, meat production is insufficient to satisfy the demands of both the tourists and the local inhabitants. However, as a joint product to pastoral pursuits, quantities of hides and wool are exported.

Fish and, in certain months, whales abound off the island. In the past, a number of ventures have been formed to exploit these resources. They have been short-lived owing, for the most part, to the lack of a sheltered harbour. However, a modern whaling station was started on the island in 1955 and production commenced during the second half of 1956, the quota of 150 humpback whales being taken before the close of the season.

An active forestry programme is being carried out to increase the resources of Norfolk Island pine and to introduce suitable types of eucalypts.

(ii) *Tourists.* The unique history and unusual beauty of the island had always attracted a number of tourists but the building of the airstrip during the 1939-45 War has made the island far more accessible and a considerable tourist industry has developed, particularly with visitors from New Zealand. The industry is at present limited only by the accommodation available. Approximately 120 can now be catered for and accommodation is being continually expanded.

(iii) *Government Instrumentalities.* A large proportion of the population is employed by Commonwealth Government instrumentalities, namely:—Department of Civil Aviation, Norfolk Island Administration, Overseas Telecommunications Commission and Department of the Interior (Meteorological Branch). The bulk of the finance for the operation of these instrumentalities is supplied by the Commonwealth Government and this greatly increases the income of the island.

**5. Trade, Transport and Communication.**—Imports to Norfolk Island in 1938-39 amounted to £27,590, mainly from Australia. Since the 1939-45 War, they have risen from £32,402 in 1945-46 to £223,925 in 1956-57. In 1956-57 the major proportion (£216,550 or 97 per cent.) still came from Australia, while New Zealand supplied £7,375 or three per cent. Exports were valued at £16,970 in 1938-39, and have risen from £9,024 in 1945-46 to £38,330 in 1955-56 and £149,833 in 1956-57. The big increase from 1955-56 to 1956-57 was due to the commencement of operations by the whaling station in the 1956-57 season. Australia was again the principal country concerned, exports thereto amounting to £146,191, while exports to New Zealand amounted to £3,642.

No duties are chargeable on goods imported into Australia from Norfolk Island if the goods are (a) the produce or manufacture of Norfolk Island; (b) shipped direct to Australia; and (c) not goods which if manufactured or produced in Australia would be subject to excise duty.

A shipping service to Norfolk Island is maintained at approximately seven-week intervals by Burns Philp & Co. Ltd., Sydney. The route is from Sydney via Norfolk Island to the New Hebrides, Solomon Islands and other island groups and thence back to Sydney. Shipping between Norfolk Island and New Zealand is infrequent.

The construction of the aerodrome on the island was completed during 1943. A fortnightly passenger and air freight service between Sydney and Norfolk Island maintained by Qantas Empire Airways Ltd. extends to New Zealand under charter to Tasman Empire Airways Ltd.

There are approximately 50 miles of usable road on Norfolk Island. As a substantial section of the population possesses private motor cars, and taxi-cab services are available, transport is almost exclusively by motor vehicle.

The cable from Great Britain via Vancouver, Fanning Island, and Fiji bifurcates at Norfolk Island, one line connecting with New Zealand, the other with Brisbane. Until 10th June, 1947, the post office at Norfolk Island was part of the Commonwealth postal system, but as from that date Norfolk Island was established as a separate postal administration with its own issue of stamps.

**6. Social Condition.**—Education is free and compulsory up to the age of fifteen years. The school conforms to the Australian standard of public education, ranging from kindergarten to the intermediate certificate, with a two years' super-primary course of instruction in cultural subjects and in woodwork, needlework, leatherwork, basketry and hat-making. The headmaster and assistant teachers are lent by the New South Wales Education Department, but they are paid by the Norfolk Island Administration. The number of scholars enrolled at 30th June, 1957, was 163, including 43 in kindergarten and first class. Dental examination and free dental service are provided for school children.

The Court of Norfolk Island is a court of record with dual jurisdiction. Sitting in its limited jurisdiction, the Court has power to hear and determine actions of claims not exceeding £30 and to punish summarily all crimes and offences involving a pecuniary penalty or a sentence of imprisonment not exceeding six months. In its full jurisdiction, the Court can hear and determine all actions, punish all crimes and offences, grant probate and letters of administration, hear and determine appeals from any conviction of the Court sitting in its limited jurisdiction, and exercise authority in all other matters. An appeal lies to the High Court of Australia from any judgment, order, decree or sentence of the Court sitting in its full jurisdiction when constituted by a Judge or the Chief Magistrate.

7. Finance.—The revenue of the Territory together with an annual grant from the Commonwealth Government for administrative expenses, is paid to the credit of the Norfolk Island Trust Fund, and advances for administrative and developmental expenses are drawn from the account. The principal sources of revenue in 1956–57 were:—Sale of liquor, £8,721; Commonwealth subsidy, £33,133, customs duties, £10,439. The total revenue was £69,237. Items of expenditure in 1956–57 were:—administrative, £23,030; miscellaneous services, £25,016; repairs and maintenance, £7,162; capital works and services, £7,616; postal services, £3,507. Total expenditure amounted to £66,331.

## PAPUA AND NEW GUINEA.

### § 1. Administration.

Following the outbreak of war, civil administration in Papua and New Guinea was suspended on 11th February, 1942, and military control commenced. The Territory of New Guinea came under Japanese occupation in 1942, but the greater part had already been recaptured by Australian and Allied Forces when the Japanese surrendered in August, 1945. Information relating to the transfer back from military to civil control under the Papua-New Guinea Provisional Administration Act 1945–1946 may be found in Official Year Book No. 39 and earlier issues.

The Papua-New Guinea Provisional Administration Act 1945–1946 was repealed by the Papua and New Guinea Act 1949 which came into force on 1st July, 1949. The latter Act approved the placing of the Territory of New Guinea under the International Trusteeship system and provides for an Administrative Union, one Administrator, one Supreme Court and one Public Service.

Provision is made for an Executive Council of not less than nine officers of the Territory, who shall be appointed by the Governor-General, and a Legislative Council consisting of twenty-nine members, namely:—(a) the Administrator; (b) sixteen officers of the Territory (who shall be known as official members); (c) three non-official members possessing such qualifications as are provided by Ordinance and elected, as provided by Ordinance, by electors of the Territory; (d) three non-official members representing the interests of the Christian missions in the Territory; (e) three non-official native members; and (f) three other non-official members.

The Legislative Council was inaugurated on 26th November, 1951, by His Excellency Sir John Northcott, while Administrator of Australia.

Subject to the Act, provision may be made by Ordinance for the establishment of Advisory Councils for Native Matters and Native Village Councils.

The Act also makes provision for the continuance of the existing laws of the Territory of Papua and the Territory of New Guinea.

### § 2. Finance.

The following table shows particulars of the financial operations of the Papua and New Guinea Administration for the years 1953–54 to 1957–58. Further information on each Territory will be found on pages 131 and 136.

TERRITORY OF PAPUA AND NEW GUINEA: REVENUE AND EXPENDITURE.  
(£.)

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
REVENUE.					
<b>Taxation—</b>					
Customs Duties .. .. .	1,931,851	2,089,143	2,443,734	2,504,415	2,760,649
Motor Registration .. .. .	36,344	42,372	47,994	54,520	62,136
Stamp Duties .. .. .	36,266	32,043	35,756	50,688	86,589
Licences .. .. .	24,759	26,312	37,717	33,869	36,174
Personal .. .. .	..	..	..	..	103,486
<b>Business Undertakings—</b>					
Post Office .. .. .	126,861	134,653	141,737	245,199	296,022
Harbour Dues, Wharfage, etc. .. .. .	52,818	63,650	68,838	66,166	103,164
Electricity Supply .. .. .	111,699	168,869	229,784	305,805	380,945
Sale of Timber .. .. .	110,491	96,384	133,094	122,609	136,529
Copra and Rubber Production .. .. .	41,352	44,508	69,722	40,267	61,766
Other Agricultural Production .. .. .	16,760	13,970	17,564		
Water Supply and Sewerage .. .. .	23,462	15,267	16,946	16,922	18,676
<b>Lands—</b>					
<b>Mining—</b>					
Royalty on Gold .. .. .	71,480	66,446	54,663	59,103	15,825
Other .. .. .	8,977	9,412	9,597	9,467	10,446
Forestry .. .. .	34,388	58,588	75,832	81,674	81,555
Land Sales, Rents, etc. .. .. .	52,838	101,618	81,578	73,727	157,710
Commonwealth Grant .. .. .	5,421,981	7,125,687	8,433,823	9,645,090	10,796,491
Fees and Fines .. .. .	55,597	67,485	69,649	105,229	121,055
All Other .. .. .	233,259	123,632	329,119	384,050	292,304
<b>Total .. .. .</b>	<b>8,391,383</b>	<b>10,280,039</b>	<b>12,297,147</b>	<b>13,798,800</b>	<b>15,521,522</b>
EXPENDITURE.					
<b>Business Undertakings—</b>					
Post Office .. .. .	275,457	363,989	546,510	540,104	607,037
Harbours .. .. .	56,588	65,434	106,755	93,444	88,158
Electricity Supply .. .. .	310,137	321,598	359,192	395,333	289,742
Saw-mill .. .. .	88,897	85,358	99,700	101,151	82,247
Water Supply and Sewerage .. .. .	71,693	83,284	109,354	119,478	114,002
<b>Social Expenditure—</b>					
Education .. .. .	389,590	466,291	602,906	780,928	835,123
Grants to Missions for Education .. .. .	90,342	107,036	102,045	100,826	180,605
Public Health, Hospitals, etc. .. .. .	1,245,493	1,655,817	1,981,634	1,933,637	1,645,761
Mission Medical Services—Grants .. .. .	130,043	191,295	245,701	274,258	232,239
Law, Order and Public Safety .. .. .	542,221	608,729	701,236	733,928	544,230
<b>District Services and Native Affairs—</b>					
Compensation to Natives for War Damage .. .. .	196,504	92,135	67,712	1,120,516	1,013,501
Other .. .. .	750,218	808,941	1,003,001		
Capital Works and Services .. .. .	2,258,150	3,142,899	3,332,416	3,713,896	4,326,456
All Other .. .. .	1,929,765	2,255,997	2,948,630	3,829,038	5,556,902
<b>Total .. .. .</b>	<b>8,335,098</b>	<b>10,248,803</b>	<b>12,146,792</b>	<b>13,736,537</b>	<b>15,516,003</b>

## § 3. Agriculture and Animal Industry.

1. **Soils.**—Although a large proportion of Papua and New Guinea is covered by skeletal soils unsuitable for agriculture, there are extensive areas in all parts where fertile soils occur, suitable for growing a wide range of crops. Most of the agriculture of the Territory up to the present has been on soils on the coastal plains, which, apart from the swamp soils, consist mainly of alluvium and podsolized alluvium. So far, these have been mostly under coconut plantations, although other crops such as rubber and cocoa have also been grown. The swamp soils, of which there are extensive areas in the Delta plains and other parts of the Gulf of Papua, and in smaller areas, are found intermittently around the coasts and along the lower reaches of the rivers, and are in general quite unsuited to any form of agricultural development.

Volcanic soils probably offer the greatest prospects for development. They are found mostly on the Central Plateau and southern foothills of the main island, but there are also areas in New Britain (particularly in the Gazelle and Willaumez Peninsulas), Bougainville and New Ireland, as well as in numbers of smaller islands. Other rich soils are the alluvials of the river valleys. The largest single area of this type is in the trough occupied by the Ramu and Markham Rivers.

2. **Climate.**—The climate, particularly the rainfall, over so wide an area as Papua and New Guinea, with its numerous islands and varying elevations, naturally presents many variations. Generally speaking, the climate is moist and tropical, except at high altitudes. There are only small differences in both daily and seasonal extremes. The Territory has no winter and summer, and thus no great variation in day-length over the year. The two seasons which are experienced are generally described as the "south-east" and the "north-west", corresponding with the periods of the year when the south-east trade winds and the north-west monsoons direct the main Territory air-flow. The south-east season prevails approximately from May to October, the trade winds attaining maximum velocities during July and August. The north-west monsoon operates over a considerably shorter period, between the end of December and about March. During the periods between these seasons, November and early December, and about March to April, there are two short spells of calm weather.

Rainfall varies considerably, from an average annual rainfall of 245 in. at Gasmata in New Britain and 231 in. at Kikori in Papua, to about 88 in. at Wewak in New Guinea and 40 in. at Port Moresby.

Although the Territory has no summer and winter, it has a wide temperature range, due to differences in altitude, varying from an absolute highest temperature of about 100° F. along the coast, to freezing point on its highest peak, Mt. Wilhelm (15,400 ft.).

Humidity in the Territory is very high throughout the year. Some coastal stations register an average relative humidity of more than 90 per cent. Humidities below 60 per cent. are rare at coastal stations, average figures varying from 80 per cent. at 9 a.m. to 65 per cent. at noon and 75 per cent. at 3 p.m. Humidity in mid-mountain forests appears to be higher than in the lowlands, while in the mossy forests there are periods when the whole belt is saturated.

3. **Suitable Crops.**—The crops which can be grown in Papua and New Guinea include coconuts, rubber, tea, coffee, cocoa, jute, kenaf, manila hemp, sisal, rice, pepper, tobacco, peanuts, kapok, cassava, ginger, cinchona, nutmeg, vanilla, tropical fruits and vegetables, sago and tung oil; but of these, the only crops of any commercial importance are copra, coffee, cocoa and rubber.

4. **Plantation Agriculture.**—The principal plantation crops cultivated are coconuts, rubber, cocoa and coffee.

*Coconuts.* Territory coconut plantations suffered severely from damage and neglect during the 1939–45 War, but rehabilitation was rapid and, in 1956–57, about 500 plantations together with native coconut stands produced 79,018 tons of copra valued at £5,648,428 for export. In addition, 11,339 tons of coconut oil valued at £1,315,776 and about 6,084 tons of coconut meal and cake valued at £125,411 were exported in 1956–57. The area (excluding native stands) planted with coconut palms in March, 1957, was 246,601 acres. A copra crushing mill was established at Rabaul in 1952. Native stands produce about 20 per cent. of the copra exported.

*Rubber.* Rubber exports have increased from an average of 1,352 tons per year during the three years 1937–38 to 1939–40 to 3,965 tons in 1956–57, valued at £1,148,542. A total area of 28,319 acres had been planted with rubber trees up to March, 1957.

*Cocoa.* Exports of cocoa beans increased from 207 tons in 1949–50 to 2,124 tons in 1956–57, valued at £462,180. The area (excluding native stands) planted with cocoa trees in March, 1957, was 45,559 acres, native stands comprising 9,312 acres.

*Coffee.* Exports of coffee beans increased from 21 tons in 1949–50 to 274 tons in 1956–57, valued at £183,158. The area (excluding native stands) planted with coffee trees in March, 1957, was 3,733 acres, native stands comprising 2,480 acres.

5. **Native Agriculture.**—Most of the native inhabitants of Papua and New Guinea are agriculturalists producing fruit and vegetables for their own consumption. The crops grown vary according to environment and altitude, and include yams, taro and sweet potatoes, coconuts, bananas, papaws, maize, sugar-cane, cassava, beans, peanuts, rice, cucurbits and tobacco. Sago is the staple food in the extensive semi-inundated areas which occur along the lower valleys of the major rivers. In these areas, it is cut largely from naturally occurring stands. In other parts of the country, small areas of sago are grown along stream banks and in swampy patches and are regarded as a reserve in times of poor harvest. In recent years, the natives have taken up the production of introduced crops such as peanuts, rice, cucurbits and maize for their own consumption and cocoa and coffee for export. In coconut areas, large quantities of copra are produced. In 1956–57, native copra production was estimated at about 20,000 tons.

In many localities, the natives follow a farming system known as "Bush Fallowing Rotation". The inhabitants of each village have, at any one time, a number of distinct and separate cleared garden areas in the land surrounding the village. The garden clearings

may be located some miles from the village and are not usually contiguous. Each garden area may be made up of a number of distinct plots owned by individual natives or families. Communal ownership of gardens is rare. The number of garden clearings (and their area) attached to each village depends on the size of the village and the fertility of the land.

The method of cultivation followed is for the jungle trees to be felled and undergrowth cleared with axes and knives, the larger trees being usually left standing. The timber and foliage is allowed to dry out and then burnt. In some localities, there is a little cultivation before the crops are planted, and root vegetables are placed in holes dug with a stick. In other places, however, there is careful preparation of the soil. Some weeding is done while the crops are growing. After harvesting, a second crop is rarely planted immediately in that garden area, but a new area of land is selected, cleared, burnt and planted. The natives return to the first area to harvest fruit from trees, such as papaw and banana, that may have been planted in the garden, but these are soon submerged in the new growth which quickly appears. The plot is allowed to lie fallow for a number of years, the period varying from 7 to 10 years or even longer, depending upon the local population pressure. During this time, high secondary jungle has probably grown. Ultimately the natives return to the original plot, and clear, burn and plant again. The cycle continues year by year throughout the agricultural land belonging to the village. The foregoing is a broad generalization of the method followed. There are, however, many variations.

The business of growing food is done by both the men and women. The division of work is usually clearly defined within the village itself but this division is not necessarily the same in all areas. Generally it is found that felling the forests is always done by the men, and carrying the harvested food home to the village is nearly always done by the women. Other work, however, such as cultivating, planting and weeding may be done by either men or women according to the customs of the particular village or area.

The advancement of native agriculture for local food supply and improved land use in village gardens, as well as for economic production of crops for sale, has a high priority in Government policy for the Territory.

**6. Animal Industry.**—At 31st March, 1957, the livestock in the Territory consisted of 11,708 cattle, 1,479 sheep, 4,710 goats and 5,603 pigs, besides horses, mules and poultry. These figures exclude native-owned livestock. The introduction of rabbits, foxes, hares and monkeys is prohibited.

A number of British breeds of cattle are represented in Territory herds. For dairying, Jersey and Australian Illawarra Shorthorns are most popular; Black Polled, Polled and Horned Shorthorns, and Red Polled cattle are raised for meat production. Under good management these breeds have done well in the Territory.

Most of the sheep now in the Territory are Romney Marsh breed located at Nondugl in the highlands of New Guinea. This breed has been tried in various parts of the Territory and has proved generally satisfactory. There are also some Asiatic sheep and crossed with Romney Marsh they produce good carcasses and are hardy. Current investigations on sheep raising which include tests and observations to determine the most suitable breeds and areas for grazing for both mutton and wool are based on the Hallstrom Livestock Station in New Guinea.

**7. Co-operative Societies.**—There has been an increase in organized co-operative societies in recent years. Societies total 227, membership 64,035 and turnover £1,027,549 for the year ended 31st March, 1957.

The following table sets out details of the number of societies, members, etc., for the year ended 31st March, 1957:—

**CO-OPERATIVE SOCIETIES: YEAR ENDED 31st MARCH, 1957.**

Type of Society.	Number of Societies.	Number of Members.	Turnover.	Rebates to Members.	Total Capital.	Total Fixed Assets.
			£	£	£	£
Consumer Societies ..	16	2,828	118,976	12,736	31,468	11,805
Producer Societies ..	30	12,395	69,917	2,482	48,201	11,289
Dual Purpose Societies ..	181	48,812	838,656	53,936	303,662	39,219
<b>Total .. ..</b>	<b>227</b>	<b>64,035</b>	<b>1,027,549</b>	<b>69,154</b>	<b>383,331</b>	<b>62,313</b>

## PAPUA.

## § 1. General Description.

1. **Early Administration.**—Particulars of the early administration of Papua are given in *Official Year Book No. 19*, page 576.

2. **Administration by the Commonwealth of Australia.**—The Territory was placed under the authority of the Commonwealth on 1st September, 1906, by proclamation issued in pursuance of Letters Patent of 18th March, 1902, and was accepted by the Commonwealth by the Papua Act, 1905, which came into force by virtue of the aforesaid proclamation. The transfer was made under the authority of Section 122 of the Constitution. The Territory is now under the control of the Commonwealth, but not included within it, and is divided into six magisterial districts, Southern Highlands, Western, Gulf, Central, Milne Bay and Northern.

3. **Area, etc.**—Papua lies wholly within the tropics. The northernmost point touches 5° S. latitude; its southernmost portion, comprising Tagula and Rossel Islands, lies between 11° S. and 12° S. latitude. It is separated from Australia by Torres Strait. The length of Papua from east to west is upwards of 920 miles; towards either end the breadth from north to south is about 200 miles, but about the centre it is considerably narrower. The Territory comprises also the islands of the Trobriand, Woodlark, D'Entrecasteaux and Louisiade groups. The length of coast-line is estimated at 3,664 miles—1,728 on the mainland, and 1,936 on the islands. The total area is about 90,600 square miles, of which 87,806 are on the mainland, and 2,794 on the islands. A reference to the physical characteristics of the Territory appears in previous issues of the *Official Year Book* (see No. 18, p. 633).

## § 2. Population.

1. **Non-indigenous Population.**—At the Census of 30th June, 1954, the non-indigenous population of Papua was 3,867 males, 2,446 females, 6,313 persons. Corresponding figures at the Census of 30th June, 1947, were, respectively, 2,057, 1,182 and 3,239.

The European population of Papua increased slowly, and with some reversals in trend, from less than 700 in 1906, the year in which the Territory came under Commonwealth control, to 1,343 at the Census of 1921. It numbered only 1,148 at the 1933 Census, but at the 1954 Census amounted to 5,295 (3,372 males and 1,923 females).

The non-European section of the non-indigenous population at 30th June, 1954, was 1,018, of whom 34 were full-bloods and 984 were half-castes with one of the parents a European. Comparable figures as at the 1947 and 1933 Censuses, respectively, were:—full-bloods—194 and 786; half-castes—503 and 227.

The estimated non-indigenous population at 30th June, 1957 was—Males, 4,897; females, 3,225; Europeans, 7,071; Asians, seven; and Others (mainly half-caste), 1,044; Total, 8,122.

2. **Native Population.**—It is not possible to give exact data regarding the number of natives, because part of the interior is not as yet under complete Government control. However, the enumerated and estimated population of the Territory of Papua at 30th June, 1957 numbered 459,396 persons. This comprised 309,896 enumerated persons (165,626 males and 144,270 females) and 149,500 estimated. The total number was distributed through districts as follows:—Southern Highlands, 125,742; Western, 49,331; Gulf (including the former Delta district), 64,188; Central, 88,344; Milne Bay, 84,791; and Northern, 47,000.

## § 3. Native Labour, Taxation and Health.

1. **Native Labour.**—The laws relating to the employment of natives are uniform in Papua and New Guinea, and are contained in the Native Labour Ordinance 1950–53. They provide for the engagement of natives under a permit. Permits are issued by a District Officer, and authorize the holder to engage natives for employment on his own behalf, or on behalf of a registered employer who has authorized him to act on his behalf. Under this Ordinance, a native may be issued with a Native Assistant's Permit, which authorizes him to solicit natives to work for his employer, or for other employers who have authorized him to act on their behalf.

Natives are employed under written agreements which have been sanctioned and attested by a District Officer. The period of the agreement must not exceed two years, but one further agreement, for a period not exceeding one year, may be drawn up, if both parties desire it. The period, in both cases, begins on the day on which the agreement is sanctioned and attested. Both parties may, by mutual consent, and with the approval of a District Officer, cancel an agreement. On the termination of an agreement, employers are required to repatriate workers to their own villages.

Natives under the age of sixteen years may not be employed. Employers must provide native employees with housing, medical attention, food and clothing free of charge. A minimum monthly wage of twenty-five shillings and a working week of 44 hours are prescribed by Ordinance. Provision is also made for compensation in the case of injury or death.

2. **Taxation.**—On 1st January, 1958, a Personal Tax was introduced for all males (including non-indigenous) of 18 years of age and over, in Papua and New Guinea. The maximum tax is £2 per annum; the tax assessed is subject to the taxpayer's ability to pay and consequently large areas have been exempted. Native Local Government Councils (which are formed voluntarily by the natives) are however, empowered to levy taxes on villagers for the purpose of providing for local services carried out by the Councils. These taxes are set off against the native's Personal Taxation.

Other taxes imposed in Papua and New Guinea include import and export duties and some of the incidence of these taxes falls on the natives.

3. **Health.**—The Department of Health has the general oversight of all medical and dental services. It maintains a large number of hospitals, which are staffed by fully-trained European medical personnel and trained native assistants, for both European and native patients. The Department has adequate facilities for research in tropical medicine.

At 30th June, 1957, there were in the Territory three European hospitals (one privately controlled); 41 native hospitals (one private and 16 mission); one mental hospital; 307 village aid posts (94 mission); 97 welfare clinics (46 mission); and three Hanseneid colonies. The Missions employ their own doctors and nurses in their medical establishments. A training school has been established for the purpose of training natives in first aid, elementary physics, chemistry, anatomy, physiology and pathology in preparation for their employment as Native Medical Assistants. Natives are also attending the Central Medical School at Suva, Fiji, to be trained as Native Medical Practitioners and for other medical occupations. The chief complaints treated in hospital are malaria, yaws, tropical ulcers, respiratory infections, hookworm, venereal and skin diseases.

#### § 4. Land Tenure.

The basic principle of the land laws of Papua is that all land not specifically alienated by due process from the natives, or established to be vacant and ownerless, is native land. At 30th June, 1957, of the total estimated area of Papua, approximately 58,000,000 acres, only 1,838,688 acres had been alienated. The distribution of alienated land at 30th June, 1957, according to tenure, was as follows:—Held by private non-indigenous inhabitants—freehold, 24,280 acres, leasehold, 305,809 acres; held by administration, 1,440,402 acres; native reserves, 68,197 acres; total, 1,838,688 acres.

Although, as the figures above show, a small amount of freehold land exists in Papua, no further estates in freehold can be granted under the provisions of the Land Ordinance 1911–1953 of Papua. Leases of various kinds may be granted by the Administration. The principal types of leases available are agricultural leases, pastoral leases, leases of town allotments, business leases and residence leases of other than town allotments, and various forms of special leases and licences over land. Leasehold terms are liberal and, in general, leases may be granted for periods of up to 99 years. Rent is based on the unimproved value of the land. For agricultural leases, the rental rate per annum is 5 per cent. of the unimproved value and for pastoral leases the rate is 2½ per cent. Concessions regarding freedom from, or reduction of, rents apply during the early developmental periods of agricultural and pastoral leases. All leases are subject to improvement conditions which may be varied or relaxed under certain circumstances. The following classes of leases were in force in Papua at 30th June, 1957:—Agricultural, 660–260,124 acres; pastoral, 31–42,373 acres; residence, 162–228 acres; special, 213–1,344 acres; mission, 362–968 acres; business, 121–240 acres; town allotment, 674–287 acres; agricultural leases granted to missions, five—245; total, 2,228–305,809 acres.

Leases of Crown land are granted by the Administrator following a land use examination, advertisement of leases available and consideration of applications by the Land Board. Dealings in privately-owned land are a matter for private treaty. Native-owned land, however, cannot be acquired or leased from the native owners by private individuals. The Administration alone may purchase native-owned land, and then only if the owners are willing to sell and the Administration is satisfied that the owners do not require, and are not likely to require, the land.

The registration of titles, interests and dealings in alienated land is provided for under the Real Property Ordinance 1913-1955 modelled on the Torrens system of land registration. A start has been made on the recording of native land ownership under the Native Land Registration Ordinance 1952.

### § 5. Production.

1. *General.*—The products of the Territory are obtained from its agricultural, forest, mining and fishing industries. Native subsistence agriculture, fishing and hunting produce most of the food requirements of the native population. The main native agricultural products are taro, yams, sweet potatoes, bananas and papaws. Peanuts are becoming of increasing importance in native diet. Non-indigenous enterprise produces most of the commodities exported. Natives however, do produce copra for export, while native enterprise in other fields of agricultural production for export purposes, e.g., cocoa and coffee, is being encouraged. The principal agricultural products of Papua for the export trade are copra and rubber. Practically all the timber milled during 1955-56 was absorbed by local building requirements. The main products of fisheries exported from Papua are trochus and green snail shell. Gold and manganese, zinc-lead and copper ores have been mined in commercial quantities.

Agricultural and pastoral conditions in Papua and New Guinea have, for the sake of convenience, been dealt with as a whole, and reference should be made to pages 128-130 for information on the soils, climate, crops, methods of cultivation, etc., throughout both Territories. The following paragraphs relate to forestry, mining, fisheries and water-power resources in Papua.

2. *Forestry.*—(i) *General.* A general description of the forest policy which applies in Papua as well as in the Trust Territory of New Guinea is given under the heading "Timber" on page 139.

(ii) *Timbers.* Mixed species tropical rain forest covers most of Papua, although north-east of Port Moresby there is an area of monsoonal savannah country. Because of the mixed nature of the timbers in any one area, their utilization on an economical basis is somewhat difficult. Kwila, the most important hardwood found in millable quantities in Papua and New Guinea occurs in important stands east of Port Moresby. Mangroves occur in large areas fringing the Gulf of Papua.

(iii) *Survey Work.* Forestry field work is being carried out in Papua with a view to assessing the forest resources available and to survey areas that will be thrown open for cutting. In the middle of 1956, tenders were called for approximately 50 million super. feet of logs on the Brown River area near Port Moresby, and the contract was subsequently let to a Port Moresby sawmiller.

(iv) *Permits.* At 30th June, 1957, 17 permits and five licences were current. The total areas of forest involved were 75,174 acres and 7,507 acres respectively. The total number of mills was 18, and the total sawn-timber produced for the year was 3.3 million super. feet, most of which was used locally.

3. *Mining.*—(i) *Variety of Minerals.* Although a large number of minerals have been found in Papua including platinum, gold, silver, copper, tin, lead, zinc, cinnabar, iron, osmiridium, manganese, sulphur, chromite, gypsum and lignite, most deposits are not of economic importance.

Gold was discovered in 1888 and has been found since in many parts of Papua. Before the 1939-45 War, gold was an important item in the Territory's production and it was the major export in 1938-39 (valued at more than £150,000), but has dwindled to insignificance since the war. Gold production in 1955-56 was 491 fine oz. and in 1954-55 1,065 fine oz. compared with an average of almost 28,000 fine oz., for the last three pre-war years. During 1956-57, the production of gold realized £6,208, bringing the total value of gold won up to 30th June, 1957, to £3,329,251.

Manganese ore valued at £540 was exported from Papua during the year ended 30th June, 1956. Large quantities of copper ore were mined and exported up to 1940. Good samples of galena (sulphide of lead) have been obtained, but other minerals are not found in commercial quantities.

(ii) *Oil Search.* Since the search for oil began in Papua in 1911, nearly £27 million has been spent. The existence of petroleum has been traced at scattered intervals over a large area, but commercial quantities have not been discovered. At 30th June, 1957, three companies held petroleum prospecting permits under the provisions of the Petroleum (Prospecting and Mining) Ordinance 1951-1955. Oil prospecting is, at present, confined mainly to the Gulf and Western Divisions.

4. *Fisheries.*—Surveys have been carried out of the resources of swimming fish. They have been demonstrated to be considerable and efforts are being made to increase the small degree of utilization. Shell fishing, particularly trochus, provides the main cash return, exports being valued at £102,142 in 1956-57.

5. *Water Power.*—Most of the rivers in Papua carry a large volume of water from a great height over a relatively short distance, thereby offering opportunities for the installation of hydro-electric power plants. It is estimated that there is at least 10 million horse-power available for this purpose.

## § 6. Trade, Transport and Communication.

1. *Customs Tariff.*—The present customs tariff provides high revenue rates on ale, spirits, wines, timepieces, cigarette papers, fancy goods and jewellery but allows duty-free entry of most necessities. There is a by-law provision under the Customs Tariff to enable duty-free admission to be granted for plant and machinery to be used mainly for developmental purposes and for goods imported by passengers. No preferential rates are specified in the schedule. Export duties are imposed on copra, cocoa, rubber, mother-of-pearl, trochus and burgos shell, and gold.

Provision is made in the Australian Customs Tariff (Papua and New Guinea Preference) 1936 for the free entry into Australia of certain goods produced in and imported direct from Papua (*see* Chapter XIII.—Trade), and a proclamation of 25th September, 1935, exempted from primage duty goods produced or manufactured in the Territory.

2. *Imports and Exports.*—(i) *Total Values.* The table below summarizes and compares the values of imports and exports for the years 1953-54 to 1957-58.

### TERRITORY OF PAPUA : IMPORTS AND EXPORTS.

(£. f.o.b.)

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Imports</i> .. .. .	5,201,969	7,471,221	8,975,834	8,661,252	8,786,758
<i>Exports</i> —					
Domestic Exports .. .. .	1,683,188	2,517,526	2,965,559	2,261,734	2,082,667
Non-Domestic Exports .. .. .	304,376	308,170	398,976	504,588	693,385
<i>Total Exports</i> .. .. .	1,987,564	2,825,696	3,364,535	2,766,322	2,776,052

(ii) *Imports.* The following table summarizes the countries of origin of imports. In the post-war years Australia has supplied a far greater proportion of the imports than was the case pre-war.

## TERRITORY OF PAPUA : COUNTRY OF ORIGIN OF IMPORTS.

(£.)

Country of Origin.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Australia .. .. .	3,788,492	5,119,030	5,759,504	5,838,299	5,632,004
Canada .. .. .	3,914	6,473	7,254	7,657	101,575
China .. .. .	10,609	(a)	352	286	453
Hong Kong .. .. .	120,215	147,786	163,424	151,555	209,398
India .. .. .	32,908	43,255	49,938	29,666	31,079
United Kingdom .. .. .	381,883	619,807	1,131,401	550,585	689,640
United States of America .. .. .	384,235	804,331	1,020,436	1,118,046	1,219,289
Other Countries .. .. .	479,713	730,539	843,525	965,158	903,320
<b>Total Imports .. .. .</b>	<b>5,201,969</b>	<b>7,471,221</b>	<b>8,975,834</b>	<b>8,661,252</b>	<b>8,786,758</b>

(a) Not available, included in " Other countries ".

(iii) *Exports. (a) Countries of Destination.* The countries of destination of Papuan exports are shown below. The decrease during 1956-57 in the value of total exports was due mainly to the decreases in the prices of copra and shell. Australia imports practically the whole of the Territory's production of these items.

## TERRITORY OF PAPUA : COUNTRY OF DESTINATION OF EXPORTS.

(£.)

Country of Destination.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Australia .. .. .	1,749,049	2,231,659	2,699,059	2,240,392	2,200,285
United Kingdom .. .. .	161,896	536,724	610,832	396,921	386,532
Other Countries .. .. .	76,619	57,313	54,644	129,009	189,235
<b>Total Exports .. .. .</b>	<b>1,987,564</b>	<b>2,825,696</b>	<b>3,364,535</b>	<b>2,766,322</b>	<b>2,776,052</b>

(b) *Principal Commodities.* The following table provides details of the value of the principal domestic exports for the same years. The decrease in value of total domestic exports during 1956-57 and 1957-58 was caused mainly by decreases in the prices of copra and shell.

## TERRITORY OF PAPUA : PRINCIPAL DOMESTIC EXPORTS.

(£.)

Commodity.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Rubber .. .. .	612,788	953,623	1,386,787	1,148,542	1,114,716
Copra .. .. .	950,216	1,381,372	1,390,068	942,286	847,472
Other Coconut Products .. .. .	27,211	..	..	..	..
Cocoa Beans .. .. .	3,638	13,314	8,759	7,717	13,825
Gold .. .. .	4,785	16,548	8,837	5,911	7,093
Shell (Marine) .. .. .	38,803	111,652	137,938	101,265	43,276
Hides and Skins (inc. Crocodile) .. .. .	23,038	22,136	23,791	26,568	35,579
Other .. .. .	22,709	18,881	9,379	29,445	20,706
<b>Total Domestic Exports .. .. .</b>	<b>1,683,188</b>	<b>2,517,526</b>	<b>2,965,559</b>	<b>2,261,734</b>	<b>2,082,667</b>

3. **Shipping.**—In 1956–57, 163 British vessels and ten of other nationalities called at Territory ports and discharged 93,698 tons of cargo and loaded 26,844 tons. Corresponding figures for 1955–56 were 131, nine, 98,522 and 29,617 respectively.

Regular passenger and freight services operate between Australia, New Guinea and Papua. Vessels trading between Australia and the East also call at Territory ports, and there are occasional ships to the United Kingdom, vessels of one shipping line trading between the United Kingdom and Australia calling at Port Moresby approximately at quarterly intervals. Coastal and inter-island shipping services are maintained by vessels operating from the two principal ports of Port Moresby and Samarai.

4. **Other Forms of Transport and Communication.**—Air services link Papua with Australia, New Guinea and the British Solomon Islands. There were 44 aerodromes and seaplane alighting areas in Papua at 30th June, 1957, and of these, 16 were the responsibility of the Department of Civil Aviation, 16 were operated and maintained by the Administration, and 12 owned and maintained by Missions, plantations and mining interests. Much of the internal traffic and freight is carried on a charter basis. Regular air services operate from Port Moresby to Daru in the West, Samarai and Popondetta in the East, and to various centres in New Guinea.

At 30th June, 1957, there were 1,445 miles of road in Papua, of which nearly 600 miles are suitable for medium and heavy traffic, the greater proportion being located in the Central and Northern Districts, which are north-east of Port Moresby.

Telephone services operate in the main centres. The radio station at Port Moresby for both transmission and reception is jointly shared by the Overseas Telecommunications Commission and the Administration. The former provides a service between Papua, Australia and the Territory of New Guinea, while the latter operates radio telephone and radio telegraph services from Port Moresby and Samarai to outstations.

Medium and short-wave programmes are broadcast from the Australian Broadcasting Commission stations 9PA and VLT located at Port Moresby.

## § 7. Finance.

The principal source of revenue for the Territory of Papua is the annual grant received from the Commonwealth Government, which in 1956–57 amounted to £4,146,911. Customs duties, £867,697 in 1956–57, are next in importance. The total revenue during 1956–57 was £5,648,104 compared with £4,983,549 in 1955–56. Of a total expenditure of £5,585,841 in 1956–57, £2,778,918 was spent on public works, £703,704 on medical services, £341,015 on native affairs and £1,762,204 on ordinary votes. Expenditure amounted to £4,833,193 in 1955–56.

For particulars of the finances of the combined Territory administration, see page 127.

## TRUST TERRITORY OF NEW GUINEA.

### § 1. General Description.

The land area of the Territory of New Guinea is about 93,000 square miles and the area, including the sea, within the lines drawn through its extreme outer points is more than one million square miles. As the coast of the Territory has not been completely surveyed, the areas of the various islands are known only approximately.

The approximate areas of the principal islands, together with the small islands adjacent thereto, are as follows:—North-East New Guinea, also called the mainland, 70,200 sq. miles; Bismarck Archipelago—New Britain, 14,100 sq. miles, New Ireland, 3,340 sq. miles, Lavongai, 460 sq. miles, Admiralty Islands, 800 sq. miles, total Bismarck Archipelago, 18,700 sq. miles; Solomon Islands—Bougainville, 3,880 sq. miles, Buka, 220 sq. miles, total Solomon Islands, 4,100 sq. miles; grand total, 93,000 sq. miles.

Information regarding physiography and climate will be found in Official Year Book No. 22, page 613, and in the *Official Handbook of the Territory of New Guinea*.

### § 2. Government.

1. **The Military Occupation (1914–18 War).**—On 17th September, 1914, the Acting Governor of German New Guinea signed terms of capitulation with the officer commanding a Naval and Military Expedition sent from Australia, and thereafter the Territory was under military administration until the establishment of Civil Government on 9th May, 1921.

2. **Mandate (1920).**—In 1919, it was decided by the Principal Allied and Associated Powers that the Territory of New Guinea, which Germany gave up as one of the terms of peace, should be entrusted to the Government of the Commonwealth under Mandate from the League of Nations. The issuing of the Mandate was, however, delayed, and it was not until 17th December, 1920, that its terms were settled, and the Mandate itself did not reach Australia until April, 1921.

The terms of the Mandate are given in Official Year Book No. 33 (*see p. 264*).

3. **1939–45 War.**—For the events following the outbreak of the Pacific War and the formation of the Papua-New Guinea Provisional Administration in 1945, *see* page 127 of this chapter and earlier issues of the Official Year Book.

4. **Trusteeship (1946).**—The Commonwealth Government undertook to place the Territory of New Guinea under the Trusteeship System established under the Charter of the United Nations. The Trusteeship Agreement for the Territory, under which the Government of Australia is the sole administering authority, was approved by the General Assembly of the United Nations Organization on 13th December, 1946. The terms of the Agreement are shown in Official Year Book No. 39, pages 355–7.

5. **Administration.**—For particulars of the administration of the Territory of New Guinea prior to the setting-up of the Papua and New Guinea Administration *see* Official Year Book No. 36 and earlier issues.

For administrative purposes, the Territory is divided into the following nine districts :—New Britain, comprising New Britain and adjacent islands ; Morobe, Madang, Eastern Highlands, Western Highlands, and Sepik on the mainland ; New Ireland, comprising New Ireland, Lavongai and adjacent islands ; Manus, comprising the Admiralty Group ; and Bougainville in the Solomon Islands. Each district is administered by a District Commissioner.

### § 3. Population.

1. **Non-indigenous Population.**—At the Census of 30th June, 1954, the non-indigenous population of the Territory of New Guinea was 7,201 males, 4,241 females, 11,442 persons. The total non-indigenous population at the Censuses of 1921, 1933 and 1947 was, respectively, 3,173, 5,216 and 6,200 persons.

The European population of the Territory increased from 64 in 1885 to 3,191 at the Census of 1933, and it reached its pre-war peak of 4,608 in 1939. At the 1954 Census, the European population numbered 8,020 (5,185 males and 2,835 females).

Malays seem to have been the first Asians brought by the Germans to German New Guinea ; 37 of them were recorded on the mainland in 1885. About 1889, the New Guinea Company began to bring Chinese, Malays and Javanese in growing numbers from Singapore and Java to work on the plantations ; in the year 1892, there were about 1,800 Asians on the mainland. By 1898, the number had decreased to 300 or 400, but it had risen to 1,830 at the time of the 1933 Census, and at 30th June, 1941, numbered 2,228, mostly Chinese. At the Census of 30th June, 1954, non-Europeans numbered 2,404, of whom Chinese (2,192) constituted the major proportion, whilst half-castes with one of the parents a European numbered 1,018.

2. **Native Population.**—The enumerated and estimated native population of the Territory of New Guinea as at 30th June, 1957, numbered 1,297,174 persons, comprising enumerated, 1,177,074 (624,033 males and 553,041 females), and estimated, 120,100. The total population was distributed throughout the several districts as follows:—Eastern Highlands, 318,191 persons; Western Highlands, 230,034; Sepik, 231,474; Madang, 129,120; Morobe, 186,983; New Britain, 97,017; New Ireland, 36,512; Bougainville, 51,608; Manus, 16,235.

### § 4. The Natives.

1. **General.**—The natives are divided into two main groups—Melanesian and Papuan—the former, with a few exceptions, constituting the population of the Bismarck Archipelago, the Solomon Islands, and the coastal districts of the New Guinea mainland, the latter inhabiting the interior of the mainland. Some tribes of Negritos exist in the mountains of New Guinea. There is a strain of Papuan, and possibly, of Polynesian blood in the Admiralty Islanders, while the Western Islanders and the inhabitants of the small islands east and south-east of New Ireland are Micronesians. (*See* Official Year Book No. 16, p. 670, and *Official Handbook of the Territory of New Guinea*, Pt. V.)

2. **Land Tenure.**—There is considerable variation throughout the Territory in the nature of customary ownership of land. In most areas some rights remain in the landholding group, and individuals within the group have limited rights of use, either for life or for a shorter period. Thus the normal system by which the rights of ownership in land use are acquired is by birth to a landholding group. Transfer of rights between individuals by sale and purchase appears to have been unusual in the past, but this practice is now an established custom in some localities and appears to be increasing. Inheritance may be based on either patrilineal or matrilineal descent, or both. In parts of the Territory, however, there is a tendency for the whole inheritance system to change, particularly in communities where it is based on matrilineal descent. In some cases, local government councils are discussing changes in land inheritance systems, and the Administration is also giving attention to the problem.

3. **Research Work.**—Research work among the native peoples of New Guinea was initiated under the German Administration and this work has been continued since on a wider scale.

4. **Education.**—Education in the Territory is provided by the Administration and various mission organizations. Schools for natives have also been established by Native Village Councils. The Education Ordinance 1952–57 enables the Administrator to establish an education advisory board, district education committees, European and native schools and to grant financial aid for educational purposes. European teachers are recruited from Australia, and native teachers are trained in the Territory by the Administration and the Missions. During the year ended 30th June, 1957, 152 schools were maintained by the Administration for 9,968 children, of whom 713 were Europeans, 337 Asians, 67 of mixed race and 8,851 natives. The total number of pupils in the various grades of mission schools was 114,976, of whom there were 107 Europeans, 186 Asians and 175 of mixed race. To assist the educational work of the Missions, the Administration provides expert advice, educational equipment, and text-books. In addition, the sum of £60,004 was distributed among the Missions as grants-in-aid during the year ended 30th June, 1957.

5. **Health of Natives.**—The main diseases affecting the native people are malaria, yaws, respiratory diseases, dysentery, tropical ulcers, hookworm and filariasis. The Department of Health is engaged in combating these diseases with a staff of fully-trained medical officers, medical assistants and orderlies in native hospitals. Its staff also supervises hospitals on plantations. It has adequate facilities for research in tropical medicine, and a training scheme for natives as medical orderlies. The Department also provides the Missions with much of their medical stores and supplies, and maintains five Hansenide colonies for the treatment of natives suffering from Hansen's Disease. There are also two mission colonies which treat Hansen's Disease. The Department also undertakes the general oversight of sanitary conditions in the Territory.

6. **Missions.**—A number of mission societies operate in the Territory. The Society of the Sacred Heart of Jesus works in the Bismarck Archipelago, the Society of the Holy Ghost, the Franciscan Order and the Society of the Divine Word along the coast of north-east New Guinea from Sepik to the Dutch border and in the Central Highlands, and the Marists in Buka and Bougainville. These are Roman Catholic Missions. Protestant Missions include the Methodist Overseas Mission in New Britain and New Ireland, the New Zealand Methodist Mission in Bougainville, the Lutheran Mission (supported and staffed by the Lutheran Churches in Australia and America) which works in Morobe, Madang, the Eastern and Western Highlands, New Britain and Manus, the New Guinea Anglican Mission in New Britain, the Seventh Day Adventist Mission in Bougainville, New Britain and the Mainland of New Guinea, the East and West Indies Bible Mission and the Baptist Mission in the Central Highlands. The South Seas Evangelical Mission (Undenominational) and the Assemblies of God Mission are also working in the Sepik area. All these societies include teaching with their missionary work.

## § 5. Land Tenure.

The principles governing the acquisition and ownership of land and types of tenure available in New Guinea are in general similar to those which obtain in Papua and, although, under the Land Ordinance 1922–1951, grants of freehold estates may be made, as a matter of policy all grants are now restricted to leaseholds. In New Guinea, however, the amount of freehold land of earlier origin held by private non-indigenous owners amounts to more than half a million acres. Freehold titles to this land, which includes a good deal of plantation land, may be transferred by purchase subject only to the general provision that dealings in land require the approval of the Administrator.

The area of the Territory of New Guinea is estimated at 59,520,000 acres, of which at 30th June, 1957, two per cent. was alienated. The following was the distribution of alienated land according to tenure at 30th June, 1957:—held by private non-indigenous inhabitants—freehold, 518,490 acres, leasehold, 303,784 acres; held by Administration, 534,524 acres; native reserves, 26,926 acres; total, 1,383,724 acres.

Leases in force at 30th June, 1957 were as follows:—Agricultural, 725—204,470 acres; dairying, 6—1,300 acres; pastoral, 16—85,637 acres; residential and business, 1,418—1,289 acres; special, 181—4,112 acres; mission, 635—2,281 acres; leases granted to Chinese in towns, 574—180 acres; long period leases from German regime, 104—4,515 acres; total, 3,659—303,784 acres.

Under German law there was a system of registration of titles in a "Ground Book", but registration did not confer an indefeasible title. The German system has been replaced by one modelled on the Torrens plan, embodied in an Ordinance entitled the Lands Registration Ordinance 1924–55. The land registers were lost during the 1939–45 War, and provision for restoration of the lost titles is made in the New Guinea Land Titles Restoration Ordinance 1951–55. A start has been made on the recording of native land interests under the Native Land Registration Ordinance 1952.

## § 6. Production.

1. **General.**—The products of the Territory are obtained from its agricultural, mining, fishing and forestry industries. A joint government-private enterprise copra crushing mill at Toboi, near Rabaul, is producing coconut oil at the rate of about 8,000–10,000 tons a year. At Bulolo, a company (Commonwealth-New Guinea Timbers Ltd.), in which the Commonwealth Government has a controlling interest, is producing high quality waterproof plywood and veneers in a factory whose capacity is over 40 million square feet, on a  $\frac{3}{8}$ -in. basis, per annum. Native subsistence agriculture, fishing and hunting produce most of the food requirements of the native population. The main native agricultural products are taro, yams, sweet potatoes, coconuts, bananas and papaw. Non-indigenous enterprise produces most of the commodities exported. Natives, however, produce copra for export and, in recent years, have taken up the production of introduced crops such as peanuts, rice, cucurbits and maize for their own consumption and cocoa and coffee for export. The principal agricultural products of New Guinea for the export trade are copra and cocoa. While most of the timber milled during 1956–57 was absorbed by the local market, exports increased over 1955–56 figures (see para. 2 below). The main products of fisheries exported from New Guinea are trochus and green snail shell, including that collected by natives. Gold is the principal mineral mined.

For information on the agricultural and pastoral industries, which, for the sake of convenience covers the Territory of Papua and New Guinea as a whole, see pages 128–130. The following paragraphs relate to the timber, fishing and mining industries in the Territory of New Guinea.

2.—**Timber.**—Various species of timber are found in the Territory, but the only accessible pure stand is the valuable pine forests of the Bulolo Valley. The main use of this timber is for the production of plywood and veneer by Commonwealth-New Guinea Timbers Ltd., which is consuming a little over 10 million super. feet of logs per annum to produce the equivalent of approximately 30 million square feet of plywood on a  $\frac{3}{8}$  inch basis (28 million in 1956–57). Exports of plywood in 1956–57 were 24 million square feet, valued at £920,000, while veneer exports of 120,000 square feet were valued at £1,000 on a  $\frac{1}{8}$  inch basis. During the year 2.6 million super. feet of logs (some suitable for plywood manufacture) to the value of £68,000, and 3.1 million super. feet of sawn timber valued at £192,000 were also exported. The Territory forests also provided flitches, battery veneer and egg-case parts for export.

The Administration sawmill previously operated at Yalu has been moved to Lae. It and the Administration mill at Keravat in New Britain, provide a considerable amount of sawn timber for local consumption, and serve as a training centre for operatives in the sawmilling industry. The Administration also operates a training centre for forestry workers, nurseries and a herbarium.

The Forestry Ordinance 1936–1951 provides for the issue of permits and licences to cut timber. Present policy calls for the orderly development of the timber industry on sound forestry principles to ensure no waste of the resources and no over-exploitation; the grant

of emergency timber permits for limited quantities to assist in providing timber for Territory requirements; the disposal by public tender of timber areas designated by forest officials of the Territory; and the development of the pine stand in the Bulolo Valley by Commonwealth-New Guinea Timbers Ltd. Timber growing on native lands cannot be acquired by private purchasers direct from the natives but must be obtained through the Administration. Royalty is payable on all forest produce taken under permit or licence. Re-afforestation on areas dedicated for forestry in perpetuity is carried out by the Administration.

At 30th June, 1957, 20 permits and eight licences were current, the total area of forest involved being 175,024 acres and 5,614 acres respectively. Forty-two sawmills and also some benches on private property were operating.

3. **Fisheries.**—The wealth of the waters of the Territory has been little exploited, but as the result of surveys and the development of the Administration fisheries service, action is being taken to promote increased use of the resources. Fish are caught at many places along the coast to supply the small local demand of the natives and of Europeans. Trochus shell to the value of £174,519 and green snail shell to the value of £45,807 were exported during 1956–57.

4. **Mining.**—The production of gold and associated silver is the most important mining activity in New Guinea. Gold has been discovered on the Waria, the Ramu, the Francisco, and the Markham Rivers, and in tributaries of the Sepik River. Rich gold deposits were discovered in the Morobe District in 1926; the field is situated about 80 miles (40 by air) inland from Lae, the nearest coastal port. Communication is established with the coast by regular air service and by road transport. Silver is found, usually associated with the gold in these deposits. Osmiridium is reported to have been found on the upper tributaries of the Ramu, and platinum on the Kabenau River. Copper has been discovered in the form of chalcopyrite and malachite in the Baining District. Iron occurs as magnetite and haematite in the Baining District, apparently in large quantities. Sulphur occurs in several localities in the volcanic regions of the Territory. Brown coal has been found on the mainland in the vicinity of Astrolabe Bay, and in the southern portion of New Ireland. The commercial production of minerals other than gold and silver has not been undertaken to date.

The granting of rights, leases and claims for mining purposes is provided for in the Mining Ordinance 1928–1947 and Regulations thereunder.

The production of gold in New Guinea during the last three pre-war years averaged about 228,000 fine oz. a year, valued at £2,000,000. In 1940–41, it amounted to 263,113 fine oz., valued at £2,808,835. Although the market price of gold has been fixed at a much higher level than in 1938–39, mining costs have risen to a much greater extent and consequently production since the war has been on a much smaller scale, averaging 91,000 fine oz., at a value of £1,200,000 a year over the five years ended 1951–52. Production in 1956–57 amounted to 78,856 fine oz., valued at £1,232,128 and in 1955–56 to 71,519 fine oz., valued at £1,117,483. The slight increase in production during 1956–57 is expected to be only temporary.

The Petroleum Ordinance 1936 has been superseded by the Petroleum (Prospecting and Mining) Ordinance 1951–1955, which has facilitated the carrying out of geological surveys and prospecting activities generally. At present one company has a permit to search for petroleum in the Sepik River area.

## § 7. Trade, Transport and Communication.

1. **Customs Tariff.**—The present customs tariff provides high revenue rates on ale, spirits, wines, timepieces, cigarette papers, fancy goods and jewellery but allows duty-free entry of most necessities. There is a by-law provision under the Customs Tariff to enable duty-free admission to be granted for plant and machinery to be used mainly for developmental purposes and for goods imported by passengers. No preferential rates are specified in the schedule.

Export duties are imposed on cocoa, copra, trepang, tortoise shell, mother-of-pearl and trochus shell, cassowary, crown pigeon and heron feathers, rubber, sulphur and sulphur-bearing substances.

Provision is made in the Australian Customs Tariff (Papua and New Guinea Preference) 1936 for the free entry into Australia of certain goods produced in and imported direct from the Territory of New Guinea (*see* Chapter XIII.—Trade), and a proclamation of 25th September, 1935 exempted from primage duty goods produced or manufactured in the Territory.

2. Imports and Exports.—(i) *Total Values.* The table below summarizes and compares the values of imports and exports for the years 1953–54 to 1957–58.

**TERRITORY OF NEW GUINEA : IMPORTS AND EXPORTS.**  
(£.)

Particulars.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
<i>Imports</i> .. .. .	8,586,024	9,577,088	10,280,029	10,918,981	11,452,012
<i>Exports—</i>					
Domestic Exports ..	9,534,072	9,589,317	9,220,446	9,548,624	8,815,592
Non-Domestic Exports ..	510,322	471,324	665,177	763,868	812,456
<i>Total Exports</i> ..	10,044,394	10,060,641	9,885,623	10,312,492	9,628,048

(ii) *Imports.* The following table summarizes the countries of origin of imports. During the past ten years by far the greatest proportion of the imports has been supplied by Australia.

**TERRITORY OF NEW GUINEA : COUNTRY OF ORIGIN OF IMPORTS.**  
(£.)

Country of Origin.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
Australia .. .. .	5,745,001	5,888,143	6,668,947	7,327,966	7,051,240
Canada .. .. .	14,483	91,845	13,939	16,423	6,996
China .. .. .	630	(a)	180	95	688
Hong Kong .. .. .	380,425	522,455	474,583	421,191	482,085
India .. .. .	137,879	121,465	149,805	116,006	145,865
United Kingdom .. .. .	526,766	701,524	743,718	701,746	766,091
United States of America .. .. .	901,083	972,947	797,869	785,611	790,151
Other Countries .. .. .	879,757	1,278,709	1,430,988	1,549,943	2,208,896
<i>Total Imports</i> ..	8,586,024	9,577,088	10,280,029	10,918,981	11,452,012

(a) Not available ; included under " Other Countries ".

(iii) *Exports.* (a) *Countries of Destination.* The countries of destination of New Guinea exports are shown below.

**TERRITORY OF NEW GUINEA : COUNTRY OF DESTINATION OF EXPORTS.**  
(£.)

Country of Destination.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
Australia .. .. .	3,651,008	4,338,701	4,575,510	4,923,756	4,956,187
United Kingdom .. .. .	5,302,264	5,079,801	4,727,759	4,556,808	3,686,900
Other Countries .. .. .	1,091,122	642,139	582,354	831,928	984,961
<i>Total Exports</i> ..	10,044,394	10,060,641	9,885,623	10,312,492	9,628,048
<i>Domestic Exports</i> ..	9,534,072	9,589,317	9,220,446	9,548,624	8,815,592
<i>Re-exports</i> .. .. .	510,322	471,324	665,177	763,868	812,456

(b) *Principal Commodities.* The following table provides details of the value of the principal domestic exports for the same years.

**TERRITORY OF NEW GUINEA : PRINCIPAL DOMESTIC EXPORTS.**

(£.)

Item.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Copra .. ..	5,883,960	5,144,352	4,795,987	4,706,142	3,673,687
Other Coconut Products .. ..	1,501,796	1,297,185	1,458,273	1,441,187	1,649,503
Cocoa Beans .. ..	245,950	512,204	352,105	454,463	814,633
Coffee Beans .. ..	58,367	72,575	91,698	179,510	222,794
Peanuts .. ..	28,809	27,628	23,336	48,701	103,388
Gold .. ..	1,409,480	1,339,473	1,064,279	1,225,447	851,506
Shell (Marine) .. ..	170,321	218,956	303,215	220,361	68,460
Timber .. ..	113,941	212,199	285,505	256,286	212,956
Plywood .. ..	66,112	644,929	749,179	919,478	1,023,365
Veneer .. ..	1,677	36,196	9,440	1,036	6,649
Other .. ..	53,659	83,620	87,429	96,013	188,651
<i>Total Domestic Exports</i>	<i>9,534,072</i>	<i>9,589,317</i>	<i>9,220,446</i>	<i>9,548,624</i>	<i>8,815,592</i>

3. *Shipping.*—Regular passenger and freight services operate between Australia, Papua and the Territory of New Guinea. Vessels trading between Australia and the East also call at Territory ports and there are some ships to the United Kingdom and North America. Coastal and inter-island shipping services are maintained by vessels operating from the principal ports of the Territory. Shipping within the Territory is regulated by the Shipping Ordinances 1951 and the Coastal Shipping, Ports and Harbours Regulations.

Main ports of call for oversea vessels are Lae, Madang and Wewak (mainland), Rabaul (New Britain), Kavieng (New Ireland), Lorengau (Manus), and Kieta (Bougainville). Ports proclaimed under the Coastal Shipping, Ports and Harbours Regulations for the service of local vessels are, in addition to the main ports above-mentioned, Salamaua, Aitape and Vanimo (mainland), Gasmata and Talasea (New Britain), Namatanai (New Ireland), and Buka Passage (Bougainville).

There are no inland waterways and the natural river system is not generally suitable for vessels except those of small tonnage.

In 1956-57, 126 British vessels and 47 vessels of other nationalities called at Territory ports and discharged 135,505 tons of cargo and loaded 135,579 tons. Corresponding figures for 1955-56 were 94, 26, 104,720 and 113,121 respectively.

4. *Other Forms of Transport and Communication.*—There are no railways, but an extensive road construction programme is being undertaken progressively to assist the economic development of the Territory. Road transport services operate in the main towns and on the trunk roads linking Rabaul and Kokopo; Lae, Bulolo and Wau; Kavieng and Namatanai; and on the network in the Eastern and Western Highland Districts centred on Goroka and Mt. Hagen. The total mileage of roads in the Territory of New Guinea at 30th June, 1957, was 3,986, of which 1,293 were suitable for heavy and medium traffic.

Air services link the Territory with Papua, Australia, Netherlands New Guinea and the British Solomon Islands. There are 109 aerodromes and seaplane alighting areas in New Guinea, and of these 27 are controlled by the Department of Civil Aviation, 39 by the Administration and 43 by private interests.

Telephone services operate in the main centres. Radio telephone trunk circuits link Port Moresby with Lae, Rabaul and Madang and service is available from subscribers telephones in Port Moresby, Lae and Rabaul, and from the Post Office at Madang. Six zone or group centres for radio telephone communication with outstations have been established at Lae, Madang, Rabaul, Kavieng, Wewak and Lorengau. From these centres radio telegraph services are also available to 111 outstations.

### § 8. Finance.

The principal sources of revenue for the Territory of New Guinea are the grant by the Commonwealth Government and customs duties. Total revenue in 1957-58 amounted to £9,114,847, towards which the grant contributed £6,188,821 and customs duties £1,894,125. The major classes of expenditure during 1957-58 were as follows:—Health, £1,225,650; district services and native affairs, £641,078; education, £637,238; justice, £237,893; agriculture, etc., £389,552; customs and marine, £125,579, forestry, £239,908; capital works and services, £2,063,908; maintenance, £855,944. Total expenditure in 1957-58 was £9,114,847 as compared with £8,150,696 in 1956-57.

For information on the finances of the combined Territory administration *see* Papua and New Guinea, § 2, page 127.

### TRUST TERRITORY OF NAURU.

1. **General.**—Nauru is an oval-shaped atoll about 12 miles in circumference, having an area of about 5,263 acres, of which approximately two-thirds is phosphate-bearing. It is situated in latitude 0° 32' S. and longitude 166° 55' E. Portion of the island between the sandy beach and the coral cliffs is fertile, and it is there that most of the Nauruans reside. With the exception of a small fringe around an inland lagoon, the plateau which contains the phosphate deposits possesses few food plants and is uninhabited, but portion of the area has been planted with fruit trees. The system of land tenure is governed by an old custom, and, with the exception of small allotments held by the Government, the British Phosphate Commissioners, and the Missions, the whole of the island is owned by individual natives. The temperature range is from 76° F. at night to 94° F. during the day and the average humidity about 80 per cent. Normally the rainfall is comparatively low for islands of the Pacific, the annual average for twenty years from 1920 to 1940 being 80.5 inches. However, falls as high as 181.76 inches during 1940 and as low as 12.29 inches during 1950 have been recorded.

2. **History.**—The island, discovered by Captain Fearn in 1798, was annexed by Germany in 1888, and prior to 1914 was part of the protectorate of German New Guinea.

In November, 1914, Nauru was occupied by a detachment from the Australian Naval and Military Expedition at Rabaul, and it was included in the cession of colonies made by Germany in 1919 to the Allied and Associated Powers, whose representatives agreed that a mandate for its administration should be conferred upon His Britannic Majesty. The mandate was confirmed by the Council of the League of Nations on 17th December, 1920. On 2nd July, 1919, the British, Australian and New Zealand Governments agreed that the administration (which, since 1915, had been in charge of an official appointed by the British Colonial Office) should be vested in an Administrator, who took up duty in June, 1921. The agreement between the three Governments was approved by the Commonwealth Parliament in the Nauru Island Agreement Act 1919, and is shown in the Schedule to that Act. A supplementary agreement concerning Nauru was drafted in May, 1923, and ratified by the Commonwealth Parliament by the Nauru Island Agreement Act 1932.

On 25th August, 1942, nine months after the outbreak of the war in the Pacific, communications with Nauru ceased, and the island was occupied by Japanese forces. It was re-occupied by a joint Australian Naval and Military Force on 14th September 1945, and civil administration was re-established on 1st November, 1945.

3. **Trusteeship Agreement.**—On 1st November, 1947, the General Assembly of the United Nations approved a Trusteeship Agreement for the Territory of Nauru submitted by the Governments of Australia, New Zealand and the United Kingdom in substitution for the terms of the mandate under which the Territory had been administered. This Agreement designates the Governments of Australia, New Zealand and the United Kingdom as the Joint Administering Authority, with the Government of Australia continuing, on behalf of the Administering Authority, to exercise full powers of legislation, administration and jurisdiction in and over the Territory. The terms of the Agreement were given in Official Year Book No. 39, pp. 370-1.

4. **Administration.**—The administration of the island is vested in an Administrator, who is obliged to conform to instructions issued by the Government which appointed him. Until the Government of Australia ceases to exercise full powers of legislation,

administration, and jurisdiction in and over the Territory on behalf of the Administering Authority in pursuance of Article 4 of the Trusteeship Agreement, all ordinances made by the Administrator are subject to confirmation or disallowance by the Governor-General of Australia acting on the advice of the Federal Executive Council. All administration expenses are met from local revenue and phosphate royalties. Native industries such as canoe-building, fishing, mat-making, etc., are encouraged by the provision of prizes at annual competitions. An agency of the Commonwealth Savings Bank has been established. There is a co-operative store managed to a large extent by Nauruans. The store books, however, are audited by Government officers. Natives are not allowed to carry or be in possession of firearms, and the use by them of intoxicating liquors and deleterious drugs is prohibited.

5. **Population.**—The Nauruan component of the population numbered about 1,100 in 1921, but had grown to more than 1,800 before the Japanese invasion in August, 1942. In 1946, it numbered less than 1,400 but by 30th June, 1957, had risen to 2,093. Chinese have for many years formed a considerable part of the population of Nauru; their numbers increased, with some reversals of trend, from about 600 in 1921 to more than 1,500 before the 1939–45 War. After the war, they increased from about 800 in 1946 to 1,491 in 1950, but at 30th June, 1957, numbered only 732. The number of other Pacific islanders in the early 1920's was almost 300, but they subsequently declined to less than 40. In recent years, the numbers have increased, and at 30th June, 1957, there were 1,105. The European population after 1921 fluctuated, but with a generally upward trend, between one and two hundred, and in 1940 numbered 192. In 1948, it numbered 247 and in 1957 it was 373. The total non-indigenous population of Nauru at 30th June, 1957, was 2,210, while the total population was 4,303.

6. **Health.**—Cases of the usual diseases known in the Pacific occur. Venereal disease is rare, but elephantiasis is occasionally met with. An area has been set apart for the segregation of sufferers from Hansen's disease, and the latest methods of treatment are applied. The total number of persons receiving treatment at 30th June, 1957, was 47, of whom, however, only 6 were in segregation at the Hansenié colony. Three hospitals are maintained on the island, one by the Administration for Nauruans, and one by the British Phosphate Commissioners for European and one for non-European employees. A regular anti-mosquito campaign is conducted. Steps have been taken by the authorities to improve the water supply and to provide efficient sanitation generally. Every Nauruan is required to undergo medical examination at intervals of three months. Baby clinics have been established to give help and advice to Nauruan mothers in respect of infant nurture.

7. **Education.**—The Administration assumed full responsibility for education on 1st October, 1923. Prior to that date, the education of native children was undertaken by the Missions, which were subsidized by the Administration. There are three primary schools, one each for European, Nauruan and Gilbertese students, one Nauruan secondary school and one mission school providing primary and secondary classes. Primary education only is provided for European children, allowances being provided to those who proceed to secondary schools in Australia. At 30th June, 1957, 468 Nauruans, 78 other Pacific Islanders, 23 Chinese and 43 Europeans were enrolled in the primary schools, and 74 at the two secondary schools. A teacher, who is on loan from the Victorian Education Department, is in charge of the European school, but education generally is controlled by a Director of Education.

The curriculum is based generally on that used in Australian schools, and the teaching is generally in English. Education is compulsory for Nauruan children from six to sixteen years of age. At 30th June, 1958, 34 Nauruans were attending secondary schools in Australia, or undertaking post-secondary training, 17 as scholarship holders and the balance sponsored by their families. In addition to these, there were three students at the Central Medical School, Suva, and one private student in New Zealand.

8. **Judiciary.**—The judicial power is vested in the Administrator, in a Central Court and a District Court. The right of appeal is provided.

9. **Religion.**—The London Missionary Society (Protestant) and the Sacred Heart of Jesus Mission (Roman Catholic) operate in Nauru.

10. **Phosphate Deposits.**—(i) *General.* From 1906 to 1919, the deposits were worked by the Pacific Phosphate Company, which also worked the deposits on Ocean Island (about 165 miles east of Nauru and part of the Gilbert and Ellice Islands Colony administered by the Colonial Office). The quantity remaining on Nauru has been estimated at about 70 million tons, and the exports average 85 per cent. to 88 per cent. of tricalcium phosphate.

The interests of the Pacific Phosphate Company in the two islands (though not in other islands in the Pacific in which it had workings) were bought by the British, Australian and New Zealand Governments on 25th June, 1920, for £3,500,000, the purchase money being contributed in the proportions of 42, 42 and 16 per cent. respectively. The Agreement of 2nd July, 1919, provides for the working of the deposits by three British Phosphate Commissioners, one appointed by each Government, and the three countries are entitled to receive the output in the same proportions of 42, 42 and 16 per cent.

(ii) *Royalty on Phosphate.* Under an agreement between the British Phosphate Commissioners and the Nauruan landowners, an increased royalty of 1s. 6d. per ton of phosphate exported was payable from 1st July, 1953, as follows:—

- (a) 3d. to the Nauru Royalty Trust Fund to be used for the benefit of Nauruans;
- (b) 10d. to the landowner, being an immediate payment of 8d. per ton, and 2d. per ton to be invested on his account;
- (c) 5d. to the Nauruan Community Long Term Investment Fund.

From 1st July, 1947, the lump sums payable to landowners from whom phosphate-bearing lands are leased were also increased to £45 per acre, with a minimum payment of £7 10s. for areas less than an acre.

(iii) *Nauru and Ocean Island Phosphate Industry.* Exports of phosphate from Nauru and Ocean Island in 1939–40 amounted to 1,243,428 tons, of which Australia received 54 per cent. and New Zealand 32 per cent. Following the interruption to production by the war in the Pacific, this figure was not exceeded until 1949–50 when 1,285,998 tons were exported (76 per cent. to Australia, 24 per cent. to New Zealand). Figures for 1956–57 were:—1,578,842 tons exported, 60 per cent. to Australia, 32 per cent. to New Zealand and eight per cent. to the United Kingdom.

Receipts from the sale of phosphate in 1939–40 amounted to £1,041,418, and the f.o.b. cost, including interest on capital, sinking fund, etc., amounted to £1,037,208. In 1946–47, sales and costs each amounted to about £500,000, but they have since increased to more than £3,000,000. In 1956–57, receipts from sales, etc., amounted to £3,080,575, and costs, etc., to £3,076,304.

During the period of the Japanese occupation from August, 1942, to September, 1945, while waiting to resume activities at Nauru and Ocean Island, the Commissioners were engaged in meeting the phosphate requirements of Australia and New Zealand from other available sources. A programme of improvements and additions to equipment has been commenced.

The amount due by the British Phosphate Commissioners to the partner Governments for purchase-money and other capital sums was £3,666,457 on 30th June, 1921, and at 30th June, 1942, this had been reduced to £3,024,373. The partner Governments agreed to a suspension of interest and sinking fund payments from 1st January, 1942, while operations at Nauru and Ocean Island were curtailed. Modified payments were resumed in 1946–47, pending a review of the position.

The review was carried out in 1950, and as a result the revised capital indebtedness of the Commissioners to the partner Governments at 30th June, 1950, was determined at £3,881,711. Interest and sinking fund payments were resumed with effect from 1st July, 1950, on the basis of repayment of the revised capital indebtedness in 35 years. At 30th June, 1957, this indebtedness had been reduced to £3,465,445.

(iv) *Employees.* Apart from a limited number of Europeans, the employees are Chinese and Pacific Islanders engaged under a one year contract. Increasing numbers of Nauruans are being employed, mainly in trade capacities.

(v) *Christmas Island Phosphates.* The Australian Government is also interested in phosphate deposits on Christmas Island (*see p. 148*).

11. *Transport.*—There is no regular air service to Nauru, but when the need arises charter flights are made to the island. Reconstruction of the airstrip to make it suitable for four-engined aircraft is in progress.

There is relatively frequent sea communication with the island. During 1956–57, 158 vessels called there. Most of the vessels are run or chartered by the British Phosphate Commissioners for the carriage of phosphate. Many of them also provide for the carriage of passengers and other cargo as required.

12. *Trade.*—The Customs Tariff of Nauru provides for the free admission of all goods other than cigars, cigarettes, tobacco, spirits, wines, beer, cider and perry, and cylinder blocks for motor cycle engines. Articles imported by the Administration for its own use and spirits for scientific purposes are exempt. The tariff rates apply to all countries alike. Imports into Nauru were valued at £192,749 in 1940 and exports, 808,400 tons of phosphate,

at £541,168. In 1956–57, imports were valued at £1,170,218 and exports, 1,278,176 tons of phosphate, at £2,236,808. Of the total imports in 1956–57, Australia supplied 75 per cent. valued at £877,695; the balance came mainly from the United Kingdom, New Zealand, Hong Kong and the United States in that order.

In 1956–57, 755,538 tons of phosphate were exported to Australia, 391,588 tons to New Zealand and 131,050 tons to the United Kingdom.

**13. Revenue and Expenditure.**—The revenue of the Administration has risen from £33,084 in 1939 to £218,916 in 1956–57, and expenditure from £29,391 to £302,349.

Of the revenue for the year ended 30th June, 1957, payments by the British Phosphate Commissioners amounted to £198,064, post office and radio receipts, £7,797, and customs duties, £3,039. Main items of expenditure were administration £75,679, miscellaneous services (health, education, etc.), £102,623 and capital works and services, £85,028.

#### TERRITORY OF HEARD AND McDONALD ISLANDS.

On 26th December, 1947, by an exchange of notes with the United Kingdom Government, the United Kingdom sovereignty over the Heard and McDonald Islands was transferred to the Commonwealth of Australia. The laws of the Australian Capital Territory were declared to be in force in the Territory by the Heard and McDonald Islands Act passed on 18th March, 1953.

At the end of 1947, an Australian scientific post was established on Heard Island and maintained as a scientific base. Following the establishment of a base at Mawson, on MacRobertson Land in the Australian Antarctic Territory, the Heard Island base has been discontinued. Heard Island lies 2,500 miles south-west of Fremantle in the South Indian Ocean, and is about 27 miles long and 13 miles wide. The McDonald Islands are 26 miles to the west of Heard Island. They are small, rocky and precipitous.

#### AUSTRALIAN ANTARCTIC TERRITORY.

On 13th February, 1954, the Australian National Antarctic Research Expedition (ANARE) established a base on MacRobertson Land at latitude 67° 36' S. and longitude 62° 53' E. The base was named Mawson in honour of the late Sir Douglas Mawson and was the first permanent Australian station to be set up on the Antarctic continent. Meteorological and other scientific research is conducted at Mawson, which is the centre for coastal and inland survey expeditions.

A second Australian scientific research station was established on the coast of Princess Elizabeth Land on 13th January, 1957 at latitude 68° 34.6' S. and longitude 77° 58.6' E. The station was named Davis in honour of Captain John King Davis of Melbourne, who commanded a number of famous Antarctic ships. The Australian and United States Governments are co-operating to maintain a research station on Vincennes Bay at latitude 66° 15' S. and longitude 110° 31' E. This station was established by the United States on 16th February, 1957, and is named Wilkes in honour of Lieutenant Charles Wilkes, who commanded the United States Exploring Expedition of 1838–40. The Government of the United States is contributing all the buildings and facilities of the Wilkes base and the Australian Government, on its part, is providing the logistic and administrative services. Scientists from both countries participate in the programme of research at Wilkes Station.

#### TERRITORY OF COCOS (KEELING) ISLANDS.

**1. General.**—The Cocos (Keeling) Islands, two separate atolls comprising some 27 small coral islands with a total area of about five square miles, are situated in the Indian Ocean in latitude 12° 5' S. and longitude 96° 53' E. They lie some 1,720 miles north-west of Perth and 2,290 miles almost due west of Darwin, whilst Johannesburg is some 3,800 miles further distant to the south-west, and Colombo is 1,400 miles to the north-west of the group.

The main islands of the Territory are West Island, the largest, about 6 miles from north to south, on which is the aerodrome and most of the European community; Home Island, the head-quarters of the Clunies-Ross Estate; Direction Island on which is situated the Cable and Wireless Station, the Admiralty Wireless Station and the Department of Civil Aviation's Marine Base; and Horsburgh Island. North Keeling Island, which forms part of the Territory, lies about 15 miles to the north of the group and has no inhabitants.

Main settlements are on West Island, Home Island and Direction Island. The group of atolls is low-lying, flat and thickly covered by coconut palms, and surrounds a lagoon which has a harbour in the northern part but which is extremely difficult for navigation.

The climate is equable and pleasant, usually being under the influence of the south-east trade winds for about three-quarters of the year. However, the winds vary at times and meteorological reports from the Territory are particularly valuable to those engaged in forecasting for the eastern Indian Ocean. The temperature varies between 70° and 89° F., and its average rainfall is 80 inches. There are occasional violent storms. The worst cyclone in their recorded history struck the islands in 1909, when about 400,000 coconut palms were uprooted or decapitated and the accompanying tidal wave left only five buildings standing.

2. **History.**—The islands were discovered in 1609 by Captain William Keeling of the East India Company. They were uninhabited and remained so until 1826 when the first settlement was established on the main atoll by an Englishman, Alexander Hare, who quitted the islands in about 1831. In the meantime, a second settlement was formed on the main atoll by John Clunies-Ross, a Scottish seaman and adventurer, who landed with several boat-loads of Malay seamen. In 1857, the islands were annexed to the Crown and formally declared part of the British Dominions, and in 1878 responsibility for their supervision was transferred from the Colonial Office to the Government of Ceylon, and subsequently, in 1882, to the Government of the Straits Settlements. By indenture in 1886, Queen Victoria granted the land comprised in the islands to John Clunies-Ross in perpetuity, and until 1946, the patriarchal rule of the head of the Clunies-Ross family was recognized. The head of the family had semi-official status as resident magistrate and representative of the Government. However, in 1946, when the islands became a dependency of the Colony of Singapore, a Resident Administrator, responsible to the Governor of Singapore, was appointed.

Other items of significance in the islands' history are:—1901—a small cable relay station was established at Direction Island; 1903—the islands were incorporated in the Settlement of Singapore; 1909—the worst cyclone in the history of the islands struck; 1914—the German cruiser *Emden* raided Direction Island but was destroyed by H.M.A.S. *Sydney*; 1944—the Islands were under military administration with allied troops stationed there (a military Administrator was appointed during the minority of the Clunies-Ross heir who came of age in 1949); 1945—a R.A.F. air-strip was constructed on West Island; 1946—civil administration was re-established.

3. **Transfer to the Commonwealth of Australia.**—On 23rd November, 1955, the Cocos Islands ceased to form part of the Colony of Singapore and were placed under the authority of the Commonwealth of Australia. The transfer was effected by an Order in Council made by Her Majesty Queen Elizabeth the Second under the Imperial Act entitled the Cocos Islands Act 1955, and by the Cocos (Keeling) Islands Act 1955 of the Commonwealth, whereby the islands were declared to be accepted by the Commonwealth as a Territory under the authority of the Commonwealth, to be known as the Territory of Cocos (Keeling) Islands.

4. **Administration.**—Responsibility for the administration of the Territory, in terms of the Cocos (Keeling) Islands Act 1955, rests with the Minister for Territories. An Official Representative was appointed on 23rd November, 1955, to take charge of the local administration of the Territory under delegation from the Minister. The laws of the Colony of Singapore which were in force in the islands immediately before the date of the transfer have, with certain exceptions, been continued in force by the Cocos (Keeling) Islands Act 1955. Those laws may be amended or repealed by Ordinances made under the provisions of that Act which empower the Governor-General to make Ordinances for the peace, order and good government of the Territory.

5. **Population.**—The population of the Territory in June, 1957, was estimated to be 632, comprising 132 Europeans, 460 Cocos Islanders and 40 Asian indentured workers. The Cocos Islanders reside on Home Island.

6. **Transport.**—An International airport was established on West Island under the control of the Department of Civil Aviation. This is a re-fuelling point for aircraft on the fortnightly air-services between Australia-South Africa and Australia-United Kingdom operated by South African Airways and Qantas Empire Airways Ltd., respectively. Although there is no regular shipping service, vessels from Australia and Singapore call at intervals.

#### TERRITORY OF CHRISTMAS ISLAND.

1. **General.** Christmas Island is an isolated bank, situated in the Indian Ocean in latitude 10° 25' 19" S, longitude 105° 42' 57" E. It is approximately 220 miles south from Java Head, at the south entrance to Sunda Straits, 810 miles from Singapore and 1,625 miles from Fremantle. Christmas Island covers an area of about 55 square miles. It

consists of a central plateau at about 600 to 800 feet, with several prominent rises up to 1,170 feet. The plateau descends to the sea in a series of steep slopes alternating with terraces, the last dropping in a cliff of 200 to 300 feet to a shore terrace, terminating in a sea cliff of 10 to 150 feet, which is continuous round the Island except in a few places, the chief of which is Flying Fish Cove where the shore is formed of coral shingles.

The principal settlement is at Flying Fish Cove which is also the only known anchorage. Vessels are moored close inshore opposite two piers with extension conveyors and direct loading to ships is carried out by these means. The main installations of the phosphate industry are located here, together with the European married quarters, and the Chinese and Malay settlements. There is a secondary settlement with maintenance shops etc. at South Point, and several other small settlements or camps across the central plateau and at the small pumping plants at springs and wells.

The climate is healthy and pleasant, the prevailing winds being from the south-east to east-south-east from May to December but from then to April (the wet season) they occasionally shift round from north to north-east. The average yearly rainfall is about 80 inches with a marked summer incidence. The porous nature of the ground prevents the formation of pools of water but there are several good springs, which maintain an adequate supply of fresh water for the small population and the installations. The mean average temperature is about 80° and does not vary greatly throughout the year.

**2. History and Administration.** The first mention of Christmas Island appears in a map published in Holland in 1666, in which it is called Moni Island, although it is believed that Captain William Mynors of the East India Company had sighted the island on Christmas Day in 1643 and had named it accordingly.

In June 1888, it was annexed by Captain H. W. May of the H.M.S. *Imperieuse* as part of the British Dominions and placed under the supervision of the Straits Settlement Government for administrative purposes. Following upon this, a small settlement was established at Flying Fish Cove by Mr. G. Clunies-Ross of Cocos (Keeling) Islands. In February, 1891, Sir John Murray and Mr. Clunies-Ross were granted a 99 year lease of the Island. This lease was transferred to the Christmas Island Phosphate Co. Ltd. in 1897, following the discovery of large deposits of phosphate of lime on the Island. In 1900, Christmas Island was incorporated for administrative purposes with the Settlement of Singapore and the laws of Singapore were generally applied to the Island.

The Straits Settlement (Repeal) Act 1946, passed by the United Kingdom, repealed the Act establishing the whole of the Straits Settlement as a single colony. Subsequently the Singapore Colony Order in Council, in 1946, decreed that the Island of Singapore and its dependencies, the Cocos or Keeling Islands and Christmas Island should be governed and administered as a separate Colony and called the Colony of Singapore. From 1st January, 1958, pending transfer to Australia, Christmas Island was administered by the United Kingdom as a separate Crown Colony. The Island was transferred to the Commonwealth of Australia on 1st October, 1958, by the Christmas Island Act 1958, and is now administered as a Territory under the authority of the Commonwealth. Responsibility for the administration and government of the Territory rests with the Minister for Territories and day to day affairs on the Island are administered by an Official Representative under delegation from the Minister. The laws which were in force in the Island at the 30th September, 1958, were continued as the laws of the Territory after its transfer to Australia on the 1st October.

**3. Industry and Commerce.** The only commercial activity carried out is the mining of phosphate. The British Phosphate Commissioners Act as managing agents for the Christmas Island Phosphate Commission.

There are three principal phosphate deposits on the Island, the largest being that now being worked at South Point. This field is situated on the 600' to 800' level and is approximately 11 miles from the drying and shipping plant at Flying Fish Cove. The present output is about 400,000 tons annually. In addition about 30,000 tons of phosphate dust is supplied annually to Malaya.

There is little prospect of any economic developments outside the phosphate industry.

**4. Population.** The population of Christmas Island, at 1st October, 1958, was approximately 2,626 consisting of 161 Europeans, 1,937 Chinese, 512 Malays and 16 Indians.

**5. Communications.** Transport connection with the island is maintained by ships operated by the Phosphate Commission or ships under charter by the Commission. The "Islander", a ship of 1,600 tons, makes regular trips between Christmas Island and Singapore at intervals of about three weeks. Chartered vessels ply between Christmas Island and Fremantle and other Australian ports. Trips average about four vessels per month.

## CHAPTER VI.

### MANUFACTURING INDUSTRY.

#### § 1. General.

**1. Introduction.**—A complete statistical account of the growth of the manufacturing industry in Australia cannot be given as the necessary statistics were not collected by the several States on a definite and uniform basis prior to 1906. A standard classification of manufacturing industries was formulated at a conference of Australian statisticians in 1902 and adopted by all States in 1906 and figures on this basis were prepared for 1907 and subsequent years.

Prior to the federation of the Australian States in 1901, the manufacturing industry in Australia was engaged primarily in the production of goods for local use, mainly food commodities, furniture, bricks, clothing made from imported materials, printing, the repair rather than the manufacture of machinery, and the preliminary treatment of primary products, such as wool-scouring and sawmilling.

After federation, steady expansion of the manufacturing industry resulted from the removal of interstate trade barriers and the operation of a uniform protective tariff. This expansion was quickened as a result of the demands created by the 1914-18 War, the curtailment of imports, and the rapid growth of spending power within the community. New and more advanced development took place, iron and steel works and many related and subsidiary industries were established, extensive manufacture of machinery was begun, and a wide range of high-grade products—textiles, metal manufactures, electrical goods, etc.—was added to the list of commodities made in Australia.

This expansion was checked by the world-wide economic depression of 1929-33, but in 1933 returning general prosperity and the opportunities opened to local manufacturers by import restrictions, together with depreciation of Australian currency, gave renewed stimulus to manufacturing enterprise. As economic conditions improved, the tariff, revenue duties, and primage were reduced, but without materially prejudicing the progress of local manufactures.

When war broke out in September, 1939, Australia became a major source of supply for British countries east of Suez and in meeting their demands, as well as those arising locally because of interruption of oversea importations, existing manufacturing industries expanded, and new enterprises were developed rapidly for the production of all classes of munitions, aircraft, ships, many new kinds of machinery and metal manufactures, scientific equipment, textiles, chemicals, etc. The outbreak of war with Japan, the basing of Allied armed forces in Australia, and Australian responsibilities for supplies in the South-west Pacific Area, gave added impetus to these developments, and manufacturing in Australia outstripped all previous levels.

The cessation of war production and the transition of industry to a peace-time basis temporarily retarded progress, but from 1945-46 onward there was renewed expansion of the manufacturing industries to which an inflow of capital from overseas contributed.

**2. Decentralization of Manufacturing Industries.**—Following upon a report by the Secondary Industries Commission, the Commonwealth Government called a conference of Commonwealth and State Ministers in August, 1945, to formulate a national policy for the decentralization of secondary industries. It was agreed that the State Governments should seek to promote decentralization along the lines appropriate to each, providing necessary services, assistance and concessions to the full extent of State resources. The Commonwealth undertook to collaborate in all matters of Commonwealth industrial policy

affecting the development and location of industry, to investigate in association with the States the prospects of developing secondary industries in selected areas, to advise the States of developments desirable for defence purposes, and to provide financial assistance for projects of national importance where the cost would be great relative to the State's resources.

The Commonwealth has assisted decentralization by allocating to private industry munitions and other defence buildings in decentralized areas and accommodating migrants in provincial centres with prospects of development. Oversea firms contemplating establishment in Australia are encouraged to select locations in rural areas or the less industrialized States.

**3. Commonwealth Division of Industrial Development.**—The functions of the Division of Industrial Development include the encouragement of industrial development, the exercising of Commonwealth responsibilities for the decentralization of industry, the promotion of industrial efficiency (especially the study of technical, production and managerial problems and the dissemination and application of new knowledge and methods), the encouragement of the development of technological institutes and the publication of studies of the structure and operation of Australian manufacturing industries. The Division was attached to the Ministry of National Development when formed in March, 1950, to plan the development of national resources and to promote decentralization and regional development in conjunction with the States, but was transferred to the Department of Trade in January, 1956.

**4. Customs and Excise Tariffs and Bounties on Manufactures.**—Particulars of Australian customs and excise tariffs, and the constitution and functions of the Australian Tariff Board in relation to matters affecting the industrial development of Australia, are given in Chapter XIII.—Trade.

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require the bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards.

**5. Scientific Research and Standardization.**—(i) *The Commonwealth Scientific and Industrial Research Organization.* The function of this Organization, reference to which also appears in Chapter XXX., is to initiate and conduct research in connexion with industries in Australia, to train research workers, to establish industrial research studentships and fellowships, to make grants in aid of pure scientific research, to establish industrial research associations in various industries, to provide for testing and standardization of scientific equipment, to conduct an information service relating to scientific and industrial matters, and to act for Australia in liaison with other countries in matters of scientific research.

(ii) *The Standards Association of Australia.* This Association, which is referred to also in Chapter XXX., acts as the national standardizing organization of Australia and issues standard specifications for materials and codes of practice. Specifications and codes are prepared and revised periodically in accordance with the needs of industry, and standards are evolved and accepted by general consent.

(iii) *The National Association of Testing Authorities.* The National Association of Testing Authorities organizes national testing facilities throughout Australia to serve private and governmental needs. Laboratories may register voluntarily in respect of tests within their competence and the Association ensures the maintenance of their standards of testing. It is expected that there will be general acceptance of certificates of tests issued in the name of the Association by the registered laboratories.

6. **Definitions in Factory Statistics.**—The statistics relating to factories have been compiled from tabulations made by the Deputy Commonwealth Statisticians of the several States from returns supplied to them annually by manufacturers in accordance with the Statistical Acts of the States and the Commonwealth. A return must be supplied in respect of every factory, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing process. This definition includes factories in educational and charitable institutions, reformatories, and other public institutions (except penitentiaries) but does not cover smallgoods makers, laundries, farriers, photography studios, florists and seedsmen, or most abattoirs. It should be noted that details relating to small establishments not classified for statistical purposes as factories are not included in the figures contained in this chapter.

If a manufacturing business is conducted in conjunction with any other activity, particulars relating to the manufacturing section only are included in the statistics. Where two or more industries are conducted in the same establishment, a separate return is obtained for each industry if practicable.

Manufacturers are requested to state in their returns particulars as to the number, age, wages, etc., of their employees, the value of premises and equipment, the horse-power of machinery, the value, and in most cases the quantities, of raw materials and fuel used, and quantities and values of principal materials and articles produced. The returns obtained from manufacturers are not intended to show a complete record of the income and expenditure of factories nor to show the profits or losses of factories collectively or individually.

The *average number of persons* employed is quoted on two different bases: the average during the period of operation and the average over the whole year. Of these, the former is simply the aggregate of the average number of persons employed in each factory during its period of operation (whether the whole or only part of the year). This average is used only in respect of details relating to classification according to the number of persons employed. The latter, which is used in all other instances, is calculated by reducing the average number working in the factories (irrespective of period of operation) to the equivalent number working for a full year.

*Working proprietors* are included in all employment figures other than those relating to monthly employment and age dissections, but salaries and wages paid in all cases exclude drawings by working proprietors.

The *value of factory output* is the value of the goods manufactured or their value after passing through the particular process of manufacture and includes the amount received for repair work, work done on commission and receipts for other factory work. The basis of valuation of the output is the selling value of the goods at the factory, exclusive of all delivery costs and charges and excise duties, but inclusive of bounty and subsidy payments to the manufacturer of the finished article.

The *value of production* is the value added to raw materials by the process of manufacture. It is calculated by deducting from the value of factory output the value (at the factory) of the materials used, containers and packing, power, fuel and light used, tools replaced, and materials used in repairs to plant (but not depreciation charges).

In the process of manufacture, many goods are treated in several industries, the output of one becoming the raw materials of another, so that such commodities are counted more than once in the aggregate value of output and of raw materials. Examples are raw sugar passing from the mills to the refinery, metals from the smelters which become raw materials in establishments concerned in the production of metal goods, and timber from the saw-mills used in furniture factories and in joinery. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason, the value of production, and not the value of the output, is used as a measure of activity in the manufacturing industries as a whole.

In the special case of Government factories and workshops, the value of output is, in most cases, estimated by adding 10 per cent. to the value of materials and fuel used and other factory costs, including salaries and wages paid.

7. **Classification of Factories.**—In the compilation of statistical data relating to factories in Australia, a standard classification of manufacturing industries, formulated at a conference of Australian statisticians in 1902 and revised from time to time, was used until the year 1929-30. A new classification was introduced in 1930-31, and this in turn was revised and extended (principally in respect of the placement and composition of sub-classes) in accordance with decisions of the Statisticians' Conference, 1945.

Owing to limitations of space, details published in general tables in this chapter are confined either to the sixteen classes of industry or to total factory activity. Particulars of certain of the sub-classes shown below are published in the latter portion of this chapter and full details for all sub-classes may be found in the Bulletin *Secondary Industries*, published annually.

The principal classes and sub-classes in the current classification of factories are as follows:—

### CLASSIFICATION OF FACTORIES.

#### CLASS I.—TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS.

Coke Works.  
Briquetting and Pulverized Coal.  
Carbide.  
Lime, Plaster of Paris, Asphalt.  
Fibrous Plaster and Products.  
Marble, Slate, etc.  
Cement, Portland.  
Asbestos Cement Sheets and Mouldings.  
Other Cement Goods.  
Other.

#### CLASS II.—BRICKS, POTTERY, GLASS, ETC.

Bricks and Tiles.  
Earthenware, China, Porcelain and Terracotta.  
Glass (other than Bottles).  
Glass Bottles.  
Other.

#### CLASS III.—CHEMICALS, DYES, EXPLOSIVES, PAINTS, OILS, GREASE.

Industrial and Heavy Chemicals and Acids.  
Pharmaceutical and Toilet Preparations.  
Explosives (including Fireworks).  
White Lead, Paints and Varnish.  
Oils, Vegetable.  
Oils, Mineral.  
Oils, Animal.  
Boiling-down, Tallow-refining.  
Soap and Candles.  
Chemical Fertilizers.  
Inks, Polishes, etc.  
Matches.  
Other.

#### CLASS IV.—INDUSTRIAL METALS, MACHINES, CONVEYANCES.

Smelting, Converting, Refining, Rolling of Iron and Steel.  
Foundries (Ferrous).  
Plant, Equipment and Machinery, etc.  
Other Engineering.  
Extracting and Refining of other Metals; Alloys.  
Electrical Machinery, Cables and Apparatus.  
Construction and Repair of Vehicles (10 groups).  
Ship and Boat Building and Repairing, Marine Engineering (Government and Other).  
Cutlery and Small Hand Tools.  
Agricultural Machines and Implements.  
Non-Ferrous Metals—  
Rolling and Extrusion.  
Founding, Casting, etc.  
Iron and Steel Sheets.  
Sheet Metal Working, Pressing, and Stamping.  
Pipes, Tubes and Fittings—Ferrous.  
Wire and Wire Netting (including Nails).  
Stoves, Ovens and Ranges.  
Gas Fittings and Meters.  
Lead Mills.  
Sewing Machines.

#### CLASS IV.—INDUSTRIAL METALS, MACHINES, CONVEYANCES—continued.

Arms, Ammunition (excluding Explosives).  
Wireless and Amplifying Apparatus.  
Other Metal Works.

#### CLASS V.—PRECIOUS METALS, JEWELLERY, PLATE Jewellery.

Watches and Clocks (including Repairs).  
Electroplating (Gold, Silver, Chromium, etc.).

#### CLASS VI.—TEXTILES AND TEXTILE GOODS (NOT DRESS).

Cotton Ginning.  
Cotton Spinning and Weaving.  
Wool—Carding, Spinning, Weaving.  
Hosiery and Other Knitted Goods.  
Silk, Natural.  
Rayon, Nylon and Other Synthetic Fibres.  
Flax Mills.  
Rope and Cordage.  
Canvas Goods, Tents, Tarpaulins, etc.  
Bags and Sacks.  
Other.

#### CLASS VII.—SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR).

Furriers and Fur-dressing.  
Woolscouring and Fellmongery.  
Tanning, Currying and Leather-dressing.  
Saddlery, Harness and Whips.  
Machine Belting (Leather or other).  
Bags, Trunks, etc.

#### CLASS VIII.—CLOTHING (EXCEPT KNITTED).

Tailoring and Ready-made Clothing.  
Waterproof and Oilskin Clothing.  
Dressmaking, Hemstitching.  
Millinery.  
Shirts, Collars, Underclothing.  
Foundation Garments.  
Handkerchiefs, Ties and Scarves.  
Hats and Caps.  
Gloves.  
Boots and Shoes (not Rubber).  
Boot and Shoe Repairing.  
Boot and Shoe Accessories.  
Umbrellas and Walking Sticks.  
Dyeworks and Cleaning, etc.  
Other.

#### CLASS IX.—FOOD, DRINK AND TOBACCO.

Flour-milling.  
Cereal Foods and Starch.  
Animal and Bird Foods.  
Chaffcutting and Concrushing.  
Bakeries (including Cakes and Pastry).  
Biscuits.  
Sugar-mills.  
Sugar-refining.

CLASS IX.—FOOD, DRINK AND TOBACCO—  
*continued.*

Confectionery (including Chocolate and Icing Sugar).  
Jam, Fruit and Vegetable Canning.  
Pickles, Sauces, Vinegar.  
Bacon Curing.  
Butter Factories.  
Cheese Factories.  
Condensed and Dried Milk Factories.  
Margarine.  
Meat and Fish Preserving.  
Condiments, Coffee, Spices.  
Ice and Refrigerating.  
Salt.  
Aerated Waters, Cordials, etc.  
Breweries.  
Distilleries.  
Wine-making.  
Cider and Perry.  
Malting.  
Bottling.  
Tobacco, Cigars, Cigarettes, Snuff.  
Dehydrated Fruit and Vegetables.  
Ice Cream.  
Sausage Casings.  
Arrowroot.  
Other.

CLASS X.—SAWMILLS, JOINERY, BOXES, ETC.,  
WOOD TURNING AND CARVING.

Sawmills.  
Plywood Mills (including Veneers).  
Bark Mills.  
Joinery.  
Cooperage.  
Boxes and Cases.  
Woodturning, Woodcarving, etc.  
Basketware and Wickerware (including Sea-grass  
and Bamboo Furniture).  
Perambulators (including Pushers and Strollers).  
Wall and Ceiling Boards (not Plaster or Cement).  
Other.

CLASS XI.—FURNITURE OF WOOD, BEDDING, ETC.  
Cabinet and Furniture Making (including Billiard  
Tables and Upholstery).  
Bedding and Mattresses (not Wire).  
Furnishing Drapery.

CLASS XI.—FURNITURE OF WOOD, BEDDING, ETC.—  
*continued.*

Picture Frames.  
Blinds.

CLASS XII.—PAPER, STATIONERY, PRINTING,  
BOOKBINDING, ETC.

Newspapers and Periodicals.  
Printing—  
Government.  
General, including Bookbinding.  
Manufactured Stationery.  
Stereotyping, Electrotyping.  
Process and Photo Engraving.  
Cardboard Boxes, Cartons and Containers.  
Paper Bags.  
Paper-making.  
Pencils, Penholders, Chalks, Crayons.  
Other.

## CLASS XIII.—RUBBER.

Rubber Goods (including Tyres Made).  
Tyre Retreading and Repairing.

## CLASS XIV.—MUSICAL INSTRUMENTS.

Gramophones and Gramophone Records,  
Pianos, Piano-Players, Organs.  
Other.

## CLASS XV.—MISCELLANEOUS PRODUCTS.

Linoleum, Leather-cloth, Oil-cloth, etc.  
Bone, Horn, Ivory and Shell.  
Plastic Moulding and Products.  
Brooms and Brushes.  
Optical Instruments and Appliances.  
Surgical and Other Scientific Instruments and  
Appliances.  
Photographic Material, (including Developing and  
Printing).  
Toys, Games and Sports Requisites.  
Artificial Flowers.  
Other.

## CLASS XVI.—HEAT, LIGHT, AND POWER.

Electric Light and Power.  
Gas Works.

8. Factory Development since 1901—Australia.—The development of the manufacturing industries in Australia at intervals since 1901 is summarized in the following table:—

## FACTORIES: AUSTRALIA.

Year.	Factories.	Employment. (a)	Salaries and Wages Paid. (b)	Value of—				
				Materials and Fuel Used.	Output.	Pro- duction. (c)	Land and Build- ings.	Plant and Ma- chinery.
	No.	'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1901 .. ..	11,143	198	(d)	(d)	(d)	(d)	(d)	(d)
1911 .. ..	14,455	312	27,528	81,763	133,022	51,259	32,701	31,516
1920-21 ..	17,113	367	62,932	213,559	323,993	110,434	60,831	68,655
1930-31 ..	21,751	339	62,455	172,489	290,799	118,310	112,211	124,498
1940-41 ..	27,300	650	137,919	386,881	644,795	257,914	144,094	161,356
1949-50 ..	41,596	917	385,797	983,924	1,645,456	661,532	259,549	285,602
1950-51 ..	43,147	969	491,718	1,306,963	2,150,835	843,872	302,785	336,615
1951-52 ..	45,844	978	611,789	1,609,839	2,634,706	1,024,867	359,490	410,144
1952-53 ..	47,740	933	635,245	1,637,142	2,720,004	1,082,862	414,446	493,534
1953-54 ..	49,576	990	705,137	1,868,431	3,095,476	1,227,045	483,431	580,715
1954-55 ..	51,056	1,031	781,640	2,069,080	3,434,589	1,365,509	555,996	698,292
1955-56 ..	52,406	1,060	853,469	2,263,346	3,764,060	1,500,714	655,582	803,540
1956-57 ..	53,200	1,063	891,090	2,400,293	4,022,413	1,622,120	761,995	923,954

(a) 1901 and 1911—average employment during period of operation. Later years relate to average employment over whole year. Working proprietors are included in all years. (b) Excludes drawings by working proprietors. (c) Value of output less value of materials and fuel, etc., used. (d) Not available.

## § 2. Number of Factories.

1. Number of Factories in each State.—The following table shows the number of factories operating in each State in the years 1938–39 and 1952–53 to 1956–57:—

## FACTORIES: NUMBER.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938–39 .. ..	9,464	9,250	3,087	2,067	2,129	944	26,941
1952–53 .. ..	19,251	15,154	5,068	3,339	3,424	1,504	47,740
1953–54 .. ..	20,199	15,533	5,199	3,577	3,523	1,545	49,576
1954–55 .. ..	20,837	15,861	5,284	3,750	3,727	1,597	51,056
1955–56 .. ..	21,602	16,053	5,378	3,908	3,871	1,594	52,406
1956–57 .. ..	21,838	16,232	5,537	4,063	3,935	1,595	53,200

2. Number of Factories in Industrial Classes.—(i) *Australia*. The next table shows the number of factories in Australia during 1938–39 and 1952–53 to 1956–57 classified in the industrial classes agreed upon by the Conference of Statisticians in 1930. Details of some of the principal industries included in the table will be found in § 11, page 185.

## FACTORIES: NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938–39.	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	564	1,276	1,280	1,303	1,337	1,331
II. Bricks, Pottery, Glass, etc. .. ..	471	623	639	662	666	672
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	666	1,090	1,099	1,124	1,139	1,162
IV. Industrial Metals, Machines, Conveyances .. ..	7,255	15,672	16,868	17,842	18,860	19,766
V. Precious Metals, Jewellery, Plate .. ..	290	681	720	746	782	824
VI. Textiles and Textile Goods (not Dress)	611	1,270	1,336	1,356	1,362	1,364
VII. Skins and Leather (not Clothing or Footwear) .. ..	533	778	783	810	789	785
VIII. Clothing (except Knitted) .. ..	4,314	7,036	7,260	7,370	7,390	7,312
IX. Food, Drink and Tobacco .. ..	5,202	7,248	7,379	7,433	7,468	7,315
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. ..	2,822	5,790	5,769	5,845	5,895	5,872
XI. Furniture of Wood, Bedding, etc. ..	1,149	2,157	2,180	2,200	2,203	2,199
XII. Paper, Stationery, Printing, Book-binding, etc. .. ..	1,816	2,121	2,179	2,224	2,303	2,367
XIII. Rubber .. ..	299	446	465	495	513	536
XIV. Musical Instruments .. ..	34	69	75	79	84	88
XV. Miscellaneous Products .. ..	413	1,035	1,095	1,119	1,188	1,185
<i>Total, Classes I. to XV.</i> .. ..	26,439	47,292	49,177	50,608	51,979	52,778
XVI. Heat, Light and Power .. ..	502	448	449	448	427	422
<b>Grand Total</b> .. ..	<b>26,941</b>	<b>47,740</b>	<b>49,576</b>	<b>51,056</b>	<b>52,406</b>	<b>53,200</b>

Although not the best index of manufacturing activity, the number of factories affords some indication of the development of secondary industries. Except for the two war years 1941–42 and 1942–43, when there were decreases, the number of factories increased each year from 1931–32 to 1956–57. In the latter year, the number of factories in Australia reached the record total of 53,200 or nearly twice the number in 1938–39.

(ii) *States, 1956-57.* The following table shows the number of factories in each State classified according to the nature of the industry:—

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, 1956-57.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	435	445	102	172	121	56	1,331
II. Bricks, Pottery, Glass, etc. .. .. .	318	161	60	64	50	19	672
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	580	345	74	83	60	20	1,162
IV. Industrial Metals, Machines, Conveyances .. .. .	8,144	5,818	2,049	1,720	1,564	471	19,766
V. Precious Metals, Jewellery, Plate .. .. .	373	273	44	58	70	6	824
VI. Textiles and Textile Goods (not Dress) .. .. .	486	740	28	49	44	17	1,364
VII. Skins and Leather (not Clothing or Footwear) .. .. .	357	297	54	38	31	8	785
VIII. Clothing (except Knitted) .. .. .	3,411	2,512	532	376	415	66	7,312
IX. Food, Drink and Tobacco .. .. .	2,672	1,999	1,038	698	611	297	7,315
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. .. .	2,321	1,387	844	348	486	486	5,872
XI. Furniture of Wood, Bedding, etc. .. .. .	799	700	296	160	170	74	2,199
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .. .	999	864	200	149	122	33	2,367
XIII. Rubber .. .. .	208	146	80	52	33	17	536
XIV. Musical Instruments .. .. .	37	30	6	7	8	..	88
XV. Miscellaneous Products .. .. .	579	430	58	45	59	14	1,185
<i>Total Classes I. to XV. .. .. .</i>	<i>21,719</i>	<i>16,147</i>	<i>5,465</i>	<i>4,019</i>	<i>3,844</i>	<i>1,584</i>	<i>52,773</i>
XVI. Heat, Light and Power .. .. .	119	85	72	44	91	11	422
<b>Grand Total .. .. .</b>	<b>21,838</b>	<b>16,232</b>	<b>5,537</b>	<b>4,063</b>	<b>3,935</b>	<b>1,595</b>	<b>53,200</b>

§ 3. Classification of Factories according to Number of Persons Employed.

1. **General.**—The size classification of factories is based on the average weekly number of persons employed during the period of operation (including working proprietors).

2. **States, 1956-57.**—The following table shows, for each State, the number of factories classified according to the average number of persons employed:—

FACTORIES : CLASSIFICATION ACCORDING TO SIZE OF FACTORY, 1956-57.

Size of Factory (Persons employed).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
NUMBER OF FACTORIES.							
Under 4 .. .. .	8,739	5,853	1,844	1,415	1,953	692	20,496
4 .. .. .	1,820	1,248	576	383	160	146	4,333
5 to 10 .. .. .	5,203	3,918	1,564	1,032	939	385	13,041
11 to 20 .. .. .	2,811	2,252	699	574	409	175	6,920
21 to 50 .. .. .	1,918	1,705	502	381	307	121	4,934
51 to 100 .. .. .	692	638	171	154	100	41	1,796
101 to 200 .. .. .	353	348	96	64	42	18	921
201 to 300 .. .. .	113	113	47	23	17	5	318
301 to 400 .. .. .	58	44	11	11	..	4	128
401 to 500 .. .. .	26	29	8	7	3	..	73
501 to 750 .. .. .	46	52	10	7	3	4	122
751 to 1,000 .. .. .	24	12	6	2	1	..	45
Over 1,000 .. .. .	35	20	3	10	1	4	73
<b>Total .. .. .</b>	<b>21,838</b>	<b>16,232</b>	<b>5,537</b>	<b>4,063</b>	<b>3,935</b>	<b>1,595</b>	<b>53,200</b>

The relative importance of large and small factories is illustrated by a classification of the average number of persons employed according to the size of factory in which they work:—

**FACTORIES : AVERAGE NUMBER OF PERSONS EMPLOYED ACCORDING TO SIZE OF FACTORY, 1956-57.**

Size of Factory (Persons employed).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>AVERAGE NUMBER EMPLOYED DURING PERIOD WORKED.</b>							
Under 4 .. .. .	16,497	11,726	3,862	2,946	3,894	1,408	40,333
4 .. .. .	7,280	4,992	2,304	1,532	640	584	17,332
5 to 10 .. .. .	36,028	27,444	10,853	7,188	6,112	2,692	90,317
11 to 20 .. .. .	40,879	33,219	10,272	8,323	5,796	2,598	101,087
21 to 50 .. .. .	59,758	53,729	15,531	12,075	9,571	3,790	154,454
51 to 100 .. .. .	48,175	44,427	12,135	10,906	6,970	2,907	125,520
101 to 200 .. .. .	49,279	48,377	13,482	9,208	5,717	2,547	128,610
201 to 300 .. .. .	27,439	27,239	11,352	5,532	4,022	1,312	76,896
301 to 400 .. .. .	20,243	14,917	3,618	3,781	..	1,424	43,983
401 to 500 .. .. .	11,361	12,852	3,724	3,185	1,285	..	32,407
501 to 750 .. .. .	28,147	31,938	5,732	4,291	1,700	2,631	74,439
751 to 1,000 .. .. .	20,764	10,459	5,311	1,896	844	..	39,274
Over 1,000 .. .. .	74,471	35,194	5,690	21,616	2,985	6,307	146,263
<b>Total .. .. .</b>	<b>440,321</b>	<b>356,513</b>	<b>103,866</b>	<b>92,479</b>	<b>49,536</b>	<b>28,200</b>	<b>1,070,915</b>
<b>Average per Factory ..</b>	<b>20.17</b>	<b>21.96</b>	<b>18.76</b>	<b>22.76</b>	<b>12.59</b>	<b>17.68</b>	<b>20.13</b>

3. Australia, 1938-39 and 1952-53 to 1956-57.—In the following table, factories in Australia are classified in broad groups for a series of years according to the number of persons employed.

**FACTORIES : CLASSIFICATION ACCORDING TO NUMBER OF PERSONS EMPLOYED, AUSTRALIA.**

Year.	Establishments Employing on the Average—							
	20 and under.		21 to 100.		101 and upwards.		Total.	
	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.
1938-39—								
Number .. .. .	21,982	129,505	4,013	170,971	946	272,022	26,941	572,498
Average .. .. .	..	5.89	..	42.60	..	287.55	..	21.25
1952-53—								
Number .. .. .	40,066	230,549	6,234	257,099	1,440	453,657	47,740	941,305
Average .. .. .	..	5.75	..	41.24	..	315.04	..	19.72
1953-54—								
Number .. .. .	41,631	236,727	6,403	265,830	1,542	494,564	49,576	997,121
Average .. .. .	..	5.69	..	41.52	..	320.73	..	20.11
1954-55—								
Number .. .. .	42,835	241,233	6,603	273,257	1,618	524,307	51,056	1,038,797
Average .. .. .	..	5.63	..	41.38	..	324.00	..	20.35
1955-56—								
Number .. .. .	44,012	246,087	6,736	279,991	1,658	542,428	52,406	1,068,506
Average .. .. .	..	5.59	..	41.57	..	327.16	..	20.39
1956-57—								
Number .. .. .	44,790	249,069	6,730	279,974	1,680	541,872	53,200	1,070,915
Average .. .. .	..	5.56	..	41.60	..	322.54	..	20.13

### § 4. Power Equipment in Factories.

1. **General.**—Since 1936–37, statistics of power equipment in factories relate to the “rated horse-power” of engines ordinarily in use and engines in reserve or idle, omitting obsolete engines. In addition, particulars of the power equipment of Central Electric Stations are collected in greater detail. To avoid duplication, it is essential that some distinction should be made between Central Electric Stations and other classes of industries. In the following tables, Central Electric Stations have been treated separately from other factories.

In 1956–57, 420 factories were recorded as using no power other than manual, the distribution of these factories among the various industries being as follows:—Fibrous Plaster and Products, 26; Galvanized Ironworking, Tinsmithing, 17; Tailoring and Ready-made Clothing, 102; Dressmaking, 9; Millinery, 7; Bakeries, 25; Cabinet and Furniture Making, 6; all other industries, 228.

2. **Rated Horse-power of Engines in Factories other than Central Electric Stations.**—The following table shows the number of factories and the total rated horse-power of engines and electric motors ordinarily in use and in reserve or idle during 1956–57:—

#### FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS, 1956-57.

State.	Number of Factories.	Rated Horse-power of Engines and Motors.	
		Ordinarily in Use.(b)	In Reserve or Idle (omitting obsolete).
New South Wales .. .. .	21,756	1,889,265	354,208
Victoria .. .. .	16,179	1,339,098	174,060
Queensland .. .. .	5,481	484,130	68,693
South Australia .. .. .	4,022	366,667	44,385
Western Australia .. .. .	3,848	238,959	31,226
Tasmania .. .. .	1,586	237,907	32,766
<b>Australia .. .. .</b>	<b>52,872</b>	<b>4,556,026</b>	<b>705,338</b>

(a) Includes Gas Works but excludes Central Electric Stations. (b) Excludes motors driven by electricity generated in factories not classified as Central Electric Stations.

3. **Rated Horse-power of Engines and Electric Motors Ordinarily in Use.**—(i) *According to Type, States.* Particulars of the types and the total rated horse-power of engines, etc., ordinarily in use in each State are given below:—

#### FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, 1956-57.

State.	Steam.		Internal Combustion.			Water.	Motors driven by Electricity.		Total. (b)
	Reciprocating.	Turbine.	Gas.	Petrol or Other Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
N.S.W. ..	84,717	118,045	986	46,555	20,985	150	1,617,827	80,051	1,889,265
Victoria ..	22,905	81,270	1,764	27,750	14,330	1,079	1,190,000	60,435	1,339,098
Queensland ..	85,085	55,553	2,615	12,821	17,004	..	311,052	87,967	484,130
S. Australia ..	9,468	11,050	1,170	7,421	11,237	10	326,311	27,082	366,667
W. Australia ..	11,167	10,638	1,393	15,788	9,973	..	190,000	5,170	238,959
Tasmania ..	1,533	3	45	10,198	531	192	225,405	3	237,907
<b>Australia ..</b>	<b>214,875</b>	<b>276,559</b>	<b>7,973</b>	<b>120,533</b>	<b>74,060</b>	<b>1,431</b>	<b>3,860,595</b>	<b>260,708</b>	<b>4,556,026</b>

(a) Includes Gas Works but excludes Central Electric Stations. (b) Excludes particulars in column (c).

(ii) *According to Type, Australia.* In the following table, details of the total rated horse-power of the various types of engines in use are given for Australia for the years 1938-39, and 1952-53 to 1956-57.

**FACTORIES(a): TYPES AND TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, AUSTRALIA.**

Year.	Steam.		Internal Combustion.			Water.	Motors driven by Electricity.		Total. (b)
	Reciprocating.	Turbine.	Gas.	Petrol or Other Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
1938-39	268,409	84,149	32,916	17,971	55,799	1,616	1,017,912	179,890	1,478,772
1952-53	232,570	171,824	10,268	109,172	150,342	1,666	2,913,521	214,617	3,589,363
1953-54	237,533	170,914	8,457	109,919	109,293	1,771	3,135,395	255,917	3,773,282
1954-55	225,192	202,162	7,407	103,954	93,465	1,695	3,398,135	226,625	4,032,010
1955-56	223,147	268,497	8,746	112,944	90,314	1,641	3,674,373	243,800	4,379,662
1956-57	214,875	276,559	7,973	120,533	74,060	1,431	3,860,595	260,708	4,556,026

(a) Includes Gas Works but excludes Central Electric Stations.

(b) Excludes particulars in column (c).

(iii) *In Classes of Industry, 1956-57.* The next table shows the total rated horse-power of engines and electric motors ordinarily in use in the various classes of industry in each State.

**FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE(b), 1956-57.**

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliciferous Mine and Quarry Products	81,685	60,215	16,632	20,748	16,200	14,988	210,468
II. Bricks, Pottery, Glass, etc.	50,074	32,889	8,558	9,344	10,603	2,141	113,609
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	138,436	136,311	10,029	20,656	39,617	10,708	355,757
IV. Industrial Metals, Machines, Conveyances	948,529	391,469	90,835	173,125	65,267	58,479	1,727,704
V. Precious Metals, Jewellery, Plate	5,049	5,263	1,158	1,132	630	65	13,297
VI. Textiles and Textile Goods (not Dress)	54,247	128,613	6,932	7,921	2,790	6,873	207,376
VII. Skins and Leather (not Clothing or Footwear)	18,069	20,152	5,713	5,641	2,883	525	52,983
VIII. Clothing (except Knitted)	23,240	30,799	4,346	3,308	2,467	955	65,115
IX. Food, Drink and Tobacco	210,815	200,943	214,194	56,951	37,297	18,979	739,179
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	177,256	122,310	95,366	35,126	49,003	40,971	520,032
XI. Furniture of Wood, Bedding, etc.	16,892	16,607	8,736	6,564	3,991	1,545	54,335
XII. Paper, Stationery, Printing, Bookbinding, etc.	67,264	94,915	9,644	14,690	5,454	80,821	272,788
XIII. Rubber	53,783	55,246	8,863	3,795	733	320	122,740
XIV. Musical Instruments	2,550	522	52	13	8	..	3,145
XV. Miscellaneous Products	22,183	27,028	629	2,043	831	411	53,125
<i>Total, Classes I. to XV.</i>	<i>1,870,072</i>	<i>1,323,282</i>	<i>481,687</i>	<i>361,057</i>	<i>237,774</i>	<i>237,781</i>	<i>4,511,653</i>
XVI. Gas Works	19,193	15,816	2,443	5,610	1,185	126	44,373
<b>Grand Total</b>	<b>1,889,265</b>	<b>1,339,098</b>	<b>484,130</b>	<b>366,667</b>	<b>238,959</b>	<b>237,907</b>	<b>4,556,026</b>

(a) Excludes Central Electric Stations.

(b) Excludes motors driven by electricity generated in factories not classified as Central Electric Stations.

4. Capacity of Engines and Generators installed in Central Electric Stations.—(i) *According to Type, Australia.* Particulars of the type and the capacity of engines and generators installed in Central Electric Stations in Australia in 1956-57 are given in the following table:—

## CENTRAL ELECTRIC STATIONS: POWER EQUIPMENT, AUSTRALIA, 1956-57.

Particulars.	Capacity of Engines and Generators.						Total.
	Steam.		Internal Combustion.			Water.	
	Reciprocating.	Turbine.	Gas.	Petrol or Other Light Oils.	Heavy Oils.		
Engines installed .. Rated H.P.	6,140	4,904,302	7,115	13,816	344,356	1,214,008	6,489,737
Generators installed—							
Kilowatt capacity—							
Total installed .. kW	4,612	3,585,597	5,105	8,535	218,875	881,881	4,704,605
Effective capacity .. ..	4,224	3,313,182	3,691	6,857	199,810	846,995	4,374,759
Horse-power equivalent—							
Total installed .. H.P.	6,182	4,806,421	6,843	11,441	293,398	1,182,144	6,306,429
Effective capacity .. ..	5,662	4,441,254	4,948	9,192	267,841	1,135,380	5,864,277

NOTE.—The number of establishments classified as Central Electric Stations in 1956-57 was 328.

(ii) *States.* Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1956-57 are given in the next table.

## CENTRAL ELECTRIC STATIONS: NUMBER AND POWER EQUIPMENT, 1956-57.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Central Electric Stations   No.	82	53	56	41	87	9	328
Engines installed .. Rated H.P.	2,608,254	1,568,721	724,231	(a)	406,482	(a)	6,489,737
Generators installed—							
Kilowatt capacity—							
Total installed .. kW	1,865,714	1,163,030	529,933	(a)	295,404	(a)	4,704,605
Effective capacity .. ..	1,734,625	1,093,368	423,905	(a)	282,703	(a)	4,374,759
Horse-power equivalent—							
Total installed .. H.P.	2,500,952	1,559,019	710,365	(a)	395,983	(a)	6,306,429
Effective capacity .. ..	2,325,230	1,465,906	568,236	(a)	378,958	(a)	5,864,277

(a) Not available for publication.

## § 5. Employment in Factories.

1. *Number Employed.*—(i) *General.* All persons employed in the manufacturing activities of a factory, including proprietors who work in their own business and "out-workers" (see para. 4 (ii), p. 163), are counted as factory employees, while those employed in selling and distributing, such as salesmen, travellers, collectors, carters employed solely on outward delivery of manufactured goods and retailing storemen, are excluded. Prior to 1945-46, the occupational grouping collected was (i) working proprietors; (ii) managers and overseers; (iii) accountants and clerks; (iv) engine-drivers and firemen; (v) workers in factory, skilled and unskilled; (vi) carters and messengers; and (vii) persons working regularly at home for the establishment. This grouping did not record separate details for technical staff (e.g., chemists, draftsmen, etc.) and supervisory staff and in 1945-46 the set-up on the collection form was amended to obtain the following groupings:—(i) Working proprietors; (ii) managerial and clerical staff including salaried managers and working directors; (iii) chemists, draftsmen and other laboratory and research staff; (iv) foremen and overseers; (v) skilled and unskilled workers; (vi) carters (excluding delivery only), messengers and persons working regularly at home.

Prior to the year 1928–29, average employment in factories was computed by dividing the sum of the number employed each week by the number of weeks worked. The figures therefore represented the average number employed over the period worked, which, for many factories, was less than a full year. Commencing with the year 1928–29, the figures represent the equivalent average number employed over a full year of fifty-two weeks. The classification of factories according to the number of persons employed (*see* § 3, p. 155), however, is still based on the old method, but for all other purposes the average number engaged over the full year is used.

(ii) *Australia.* Particulars of the numbers employed, the increase in employment and the rate per cent. of such increase are given for the years 1938–39 and 1952–53 to 1956–57 in the following table :—

**FACTORIES : EMPLOYMENT, AUSTRALIA.**

Year.	Males.			Females.			Persons.		
	Number Em- ployed.	Increase on Preceding Year.		Number Em- ployed.	Increase on Preceding Year.		Number Em- ployed.	Increase on Preceding Year.	
		Number	Per Cent.		Number	Per Cent.		Number	Per Cent.
1938–39 ..	412,591	3,989	0.98	152,515	1,957	1.30	565,106	5,946	1.06
1952–53 ..	723,404	-18,567	-2.50	209,857	-25,689	-10.91	933,261	-44,256	-4.53
1953–54 ..	758,508	35,104	4.85	231,034	21,177	10.09	989,542	56,281	6.03
1954–55 ..	788,691	30,183	3.98	242,391	11,357	4.92	1,031,082	41,540	4.20
1955–56 ..	811,847	23,156	2.94	248,651	6,260	2.58	1,060,498	29,416	2.85
1956–57 ..	813,551	1,704	0.21	249,847	1,196	0.48	1,063,398	2,900	0.27

NOTE.—Minus sign (–) indicates decrease.

(iii) *States.* The following table shows, for the same years, (a) the average number of persons employed in manufacturing industries in each State; (b) for each State, the percentage of the total number employed in factories in Australia; and (c) the number so employed per ten thousand of mean population in each State and Australia.

**FACTORIES : EMPLOYMENT.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Taa.	Aust.
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AVERAGE NUMBER EMPLOYED DURING FULL YEAR (52 WEEKS).

1938–39 ..	228,781	201,831	54,110	43,371	23,211	13,802	565,106
1952–53 ..	380,213	310,759	93,123	80,483	45,188	23,495	933,261
1953–54 ..	402,595	331,277	98,119	85,503	47,459	24,589	989,542
1954–55 ..	419,810	346,648	100,293	89,565	49,314	25,452	1,031,082
1955–56 ..	433,081	355,185	102,473	92,589	50,108	27,062	1,060,498
1956–57 ..	436,369	355,204	103,426	91,981	48,748	27,670	1,063,398

PERCENTAGE OF AUSTRALIAN TOTAL.

1938–39 ..	40.48	35.72	9.58	7.67	4.11	2.44	100
1952–53 ..	40.74	33.30	9.98	8.62	4.84	2.52	100
1953–54 ..	40.68	33.48	9.92	8.64	4.80	2.48	100
1954–55 ..	40.71	33.62	9.73	8.69	4.78	2.47	100
1955–56 ..	40.84	33.49	9.66	8.73	4.73	2.55	100
1956–57 ..	41.04	33.40	9.73	8.65	4.58	2.60	100

FACTORIES : EMPLOYMENT—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
PER 10,000 OF POPULATION.							
1938-39 ..	836	1,078	537	729	497	581	815
1952-53 ..	1,112	1,315	746	1,074	737	761	1,067
1953-54 ..	1,182	1,367	754	1,088	753	795	1,112
1954-55 ..	1,213	1,393	757	1,109	746	813	1,134
1955-56 ..	1,229	1,385	758	1,110	750	848	1,138
1956-57 ..	1,216	1,345	749	1,068	712	848	1,115

2. Rates of Increase, 1938-39 and 1952-53 to 1956-57.—The percentage increase on the average number of persons employed in the preceding year is shown below for each State :—

## FACTORIES : ANNUAL PERCENTAGE INCREASE OF PERSONS EMPLOYED.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 ..	1.74	0.02	3.82	-1.62	0.34	4.80	1.06
1952-53 ..	-6.35	-4.13	-1.30	-4.08	0.20	-2.21	-4.53
1953-54 ..	5.89	6.60	5.36	6.24	5.03	4.66	6.03
1954-55 ..	4.28	4.64	2.22	4.75	3.91	3.51	4.20
1955-56 ..	3.16	2.46	2.17	3.38	1.61	6.33	2.85
1956-57 ..	0.75	0.00	0.93	-0.66	-2.71	2.25	0.27

NOTE.—Minus sign (-) indicates decrease.

3. Persons Employed in Classes of Industry.—(i) *Australia.* The following table shows the average number of persons employed in factories in each industrial class in Australia for the years 1938-39 and 1952-53 to 1956-57 :—

## FACTORIES : PERSONS EMPLOYED IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39	1952-53.	1953-54.	1954-55	1955-56.	1956-57.
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	10,343	18,752	18,748	20,560	20,893	20,318
II. Bricks, Pottery, Glass, etc. .. ..	15,709	19,571	21,708	22,549	22,914	22,162
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	19,816	36,139	37,988	41,324	44,718	45,753
IV. Industrial Metals, Machines, Conveyances .. ..	177,677	376,398	397,713	422,124	444,274	447,405
V. Precious Metals, Jewellery, Plate .. ..	3,726	5,398	5,970	6,029	5,894	6,053
VI. Textiles and Textile Goods (not Dress)	46,082	60,087	69,482	69,046	68,356	70,176
VII. Skins and Leather (not Clothing or Footwear) .. ..	10,767	14,126	14,676	14,502	13,810	13,454
VIII. Clothing (except Knitted) .. ..	86,092	105,681	112,520	112,802	110,820	109,266
IX. Food, Drink and Tobacco .. ..	83,846	120,668	123,073	125,934	126,493	124,723
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. ..	30,739	56,984	58,932	61,153	61,914	60,008
XI. Furniture of Wood, Bedding, etc. .. ..	15,287	20,353	20,975	21,342	21,508	21,258
XII. Paper, Stationery, Printing, Book-binding, etc. .. ..	39,913	53,219	56,119	59,777	62,713	64,719
XIII. Rubber .. ..	7,502	12,288	14,962	16,325	17,287	17,844
XIV. Musical Instruments .. ..	451	1,267	1,575	1,623	1,739	1,902
XV. Miscellaneous Products .. ..	7,727	17,240	19,565	19,962	20,967	21,746
<i>Total, Classes I. to XV.</i> .. ..	<i>555,677</i>	<i>918,171</i>	<i>974,006</i>	<i>1,015,052</i>	<i>1,044,300</i>	<i>1,046,787</i>
XVI. Heat, Light and Power .. ..	9,429	15,090	15,536	16,030	16,198	16,611
<b>Grand Total..</b> .. ..	<b>565,106</b>	<b>933,261</b>	<b>989,542</b>	<b>1,031,082</b>	<b>1,060,498</b>	<b>1,063,398</b>

(ii) *States.* Particulars of the numbers employed in each industrial class are shown in the following table for each State :—

**FACTORIES : PERSONS EMPLOYED IN INDUSTRIAL CLASSES, 1956-57.**

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metallicious Mine and Quarry Products ..	7,865	6,398	1,827	1,909	1,536	783	20,318
II. Bricks, Pottery, Glass, etc. ..	11,313	5,652	1,271	2,159	1,402	365	22,162
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	20,566	16,653	1,805	3,274	2,768	687	45,753
IV. Industrial Metals, Machines, Conveyances ..	201,216	131,299	36,540	49,809	19,490	9,051	447,405
V. Precious Metals, Jewellery, Plate ..	2,437	2,605	334	426	231	20	6,053
VI. Textiles and Textile Goods (not Dress) ..	23,233	37,945	2,145	2,690	977	3,186	70,176
VII. Skins and Leather (not Clothing or Footwear) ..	5,414	4,724	1,314	1,295	634	73	13,454
VIII. Clothing (except Knitted) ..	43,924	47,093	8,535	5,261	3,612	841	109,266
IX. Food, Drink and Tobacco ..	38,801	37,542	26,372	11,033	6,511	4,464	124,723
X. Sawmills, Joinery, Boxes, etc. Wood Turning and Carving ..	20,051	15,093	10,684	4,787	5,898	3,495	60,008
XI. Furniture of Wood, Bedding, etc. ..	8,191	6,312	2,924	2,044	1,301	486	21,258
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	27,569	21,619	5,394	3,949	2,551	3,637	64,719
XIII. Rubber ..	7,854	6,848	1,708	1,037	250	147	17,844
XIV. Musical Instruments ..	1,494	293	46	38	31	..	1,902
XV. Miscellaneous Products ..	9,510	10,313	595	719	410	199	21,746
<i>Total, Classes I. to XV.</i>	<i>429,438</i>	<i>350,389</i>	<i>101,494</i>	<i>90,430</i>	<i>47,602</i>	<i>27,434</i>	<i>1,046,787</i>
XVI. Heat, Light and Power ..	6,931	4,815	1,932	1,551	1,146	236	16,611
<b>Grand Total ..</b>	<b>436,369</b>	<b>355,204</b>	<b>103,426</b>	<b>91,981</b>	<b>48,748</b>	<b>27,670</b>	<b>1,063,398</b>

4. **Persons Employed According to Occupational Grouping.**—(i) *General.* In the following table, the average number of persons employed in each State during 1956-57 is classified according to occupational grouping. As mentioned previously, persons employed in factories are now classified on a basis different from that adopted prior to 1945-46. The nature of this change is indicated in para. 1 of this section (*see p.* 159).

**FACTORIES : PERSONS EMPLOYED—OCCUPATIONAL GROUPING, 1956-57.**

State.	Average Number of Persons Employed.						Total.
	Working Proprietors.	Managerial and Clerical Staff, etc.(a)	Chemists, Draftsmen, etc.	Foremen and Overseers.	Workers in Factory (Skilled and Unskilled).	Carters (excluding Delivery only) and Messengers, etc. (b)	
New South Wales ..	16,029	52,280	6,380	18,976	340,645	2,059	436,369
Victoria ..	13,967	40,279	5,585	15,498	277,507	2,368	355,204
Queensland ..	4,925	10,230	1,002	3,937	82,802	530	103,426
South Australia ..	2,829	10,903	1,557	4,229	72,104	359	91,981
Western Australia ..	2,715	4,155	454	2,089	39,236	99	48,748
Tasmania ..	1,013	2,749	571	1,333	21,873	131	27,670
<i>Total Males</i> ..	<i>36,455</i>	<i>74,275</i>	<i>14,165</i>	<i>42,781</i>	<i>641,308</i>	<i>4,567</i>	<i>813,551</i>
<i>Total Females</i> ..	<i>5,023</i>	<i>46,321</i>	<i>1,384</i>	<i>3,281</i>	<i>192,859</i>	<i>979</i>	<i>249,847</i>
<b>Total Persons</b> ..	<b>41,478</b>	<b>120,596</b>	<b>15,549</b>	<b>46,062</b>	<b>834,167</b>	<b>5,546</b>	<b>1,063,398</b>

(a) Includes salaried managers and working directors at home.

(b) Includes persons working regularly at home.

(ii) *Outworkers.* The term "outworker" or "homeworker" has acquired a special meaning in connexion with manufacturing industries, and embraces only persons to whom work is given out by factories to be done at home. Owing to the amended employment groupings adopted in 1945-46, persons working regularly at home for factories are now included with carters, messengers and others and separate details are no longer available. The number of "outworkers" employed by factories in 1944-45 was 1,049.

5. *Monthly Employment, 1938-39 and 1952-53 to 1956-57.*—(i) *Australia.* The following table shows the number of persons (excluding working proprietors) employed in factories on the pay-day nearest to the 15th of each month for the year 1938-39 and on the last pay-day of the month in the later years.

**FACTORIES : MONTHLY EMPLOYMENT, AUSTRALIA.**  
(EXCLUDING WORKING PROPRIETORS.)

Month.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
MALES.						
July .. .. .	387,693	688,670	704,109	739,450	768,382	775,580
August .. .. .	389,979	682,882	707,438	741,435	770,312	774,506
September .. .. .	391,576	680,026	710,246	743,638	771,715	774,119
October .. .. .	393,977	679,901	715,338	746,139	774,071	774,455
November .. .. .	395,192	680,398	719,230	750,285	777,304	777,127
December .. .. .	394,438	678,174	716,202	747,230	772,509	772,479
January .. .. .	385,742	680,298	722,277	750,823	774,077	773,419
February .. .. .	392,056	689,012	727,754	755,456	778,552	779,646
March .. .. .	395,146	694,516	732,000	757,956	779,527	780,973
April .. .. .	391,005	697,202	731,923	760,139	780,418	777,262
May .. .. .	393,609	698,711	734,340	761,555	780,252	779,757
June .. .. .	390,963	701,500	738,002	763,488	777,968	780,156
FEMALES.						
July .. .. .	147,282	201,464	212,322	231,222	238,883	240,918
August .. .. .	149,294	200,393	214,644	232,603	240,857	241,429
September .. .. .	151,159	199,910	218,078	234,818	243,289	243,199
October .. .. .	152,473	201,107	222,255	236,930	244,840	245,130
November .. .. .	152,806	201,346	224,672	238,146	244,582	245,006
December .. .. .	151,165	199,707	224,100	236,804	242,366	242,175
January .. .. .	141,853	201,596	228,838	236,664	240,574	243,191
February .. .. .	151,883	209,939	232,678	242,008	247,841	248,336
March .. .. .	154,854	213,470	236,354	242,573	247,209	250,728
April .. .. .	152,614	211,725	234,175	239,460	244,588	245,873
May .. .. .	150,693	211,392	232,333	238,450	243,989	244,055
June .. .. .	148,601	211,551	232,009	238,529	242,548	242,966
PERSONS.						
July .. .. .	534,975	890,134	916,431	970,672	1,007,265	1,016,498
August .. .. .	539,273	883,275	922,082	974,038	1,011,169	1,015,935
September .. .. .	542,735	879,936	928,324	978,456	1,015,004	1,017,318
October .. .. .	546,450	881,008	937,593	983,069	1,018,911	1,019,585
November .. .. .	547,998	881,744	943,902	988,431	1,021,886	1,022,133
December .. .. .	545,603	877,881	940,302	984,034	1,014,875	1,014,654
January .. .. .	527,595	881,894	951,115	987,487	1,014,651	1,016,610
February .. .. .	543,939	898,951	960,432	997,464	1,026,393	1,027,982
March .. .. .	550,000	907,986	968,354	1,000,529	1,026,736	1,031,701
April .. .. .	543,619	908,927	966,098	999,599	1,025,006	1,023,135
May .. .. .	544,302	910,103	966,673	1,000,005	1,024,241	1,023,811
June .. .. .	539,564	913,051	970,011	1,002,017	1,020,516	1,023,122

(ii) States. Particulars of the numbers employed in each State on the last pay-day of each month in 1956-57 are shown in the following table :—

**FACTORIES : MONTHLY EMPLOYMENT, 1956-57.**

(EXCLUDING WORKING PROPRIETORS.)

Month.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>MALES.</b>							
July .. ..	312,311	245,995	83,311	73,628	39,363	20,972	775,580
August .. ..	312,475	245,787	82,691	73,322	39,200	21,031	774,506
September .. ..	312,892	244,644	82,753	73,167	39,576	21,087	774,119
October .. ..	313,779	244,317	82,558	73,007	39,614	21,180	774,455
November .. ..	314,971	245,747	82,776	72,813	39,537	21,283	777,127
December .. ..	314,425	245,225	78,981	72,807	39,393	21,648	772,479
January .. ..	316,480	245,220	76,423	73,746	39,471	22,079	773,419
February .. ..	317,940	246,878	79,412	73,651	39,975	21,790	779,646
March .. ..	318,356	247,576	80,144	73,231	40,066	21,600	780,973
April .. ..	317,196	246,282	79,777	72,861	39,751	21,395	777,262
May .. ..	318,134	246,166	81,548	72,721	39,822	21,366	779,757
June .. ..	317,824	245,814	83,165	72,553	39,556	21,244	780,156
<b>FEMALES.</b>							
July .. ..	102,990	93,961	16,769	15,529	6,409	5,260	240,918
August .. ..	103,388	94,049	16,952	15,470	6,401	5,169	241,429
September .. ..	104,370	94,830	17,141	15,403	6,522	4,933	243,199
October .. ..	105,744	95,585	17,058	15,401	6,529	4,813	245,130
November .. ..	105,683	95,324	16,944	15,679	6,544	4,832	245,006
December .. ..	104,193	94,000	16,631	15,913	6,497	4,941	242,175
January .. ..	103,411	93,549	16,703	17,667	6,496	5,365	243,191
February .. ..	104,820	96,929	17,624	17,162	6,564	5,237	248,336
March .. ..	105,678	98,440	17,614	17,116	6,680	5,200	250,728
April .. ..	104,654	96,184	16,839	16,302	6,562	5,332	245,873
May .. ..	104,525	95,101	16,708	15,817	6,489	5,414	244,055
June .. ..	104,642	94,333	16,793	15,775	6,262	5,161	242,966
<b>PERSONS.</b>							
July .. ..	415,301	339,956	100,080	89,157	45,772	26,232	1,016,498
August .. ..	415,863	339,836	99,643	88,792	45,601	26,200	1,015,935
September .. ..	417,262	339,474	99,894	88,570	46,098	26,020	1,017,318
October .. ..	419,523	339,902	99,616	88,408	46,143	25,993	1,019,585
November .. ..	420,654	341,071	99,720	88,492	46,081	26,115	1,022,133
December .. ..	418,618	339,225	95,612	88,720	45,890	26,589	1,014,654
January .. ..	419,891	338,769	93,126	91,413	45,967	27,444	1,016,610
February .. ..	422,760	343,807	97,036	90,813	46,539	27,027	1,027,982
March .. ..	424,034	346,016	97,758	90,347	46,746	26,800	1,031,701
April .. ..	421,850	342,466	96,616	89,163	46,313	26,727	1,023,135
May .. ..	422,659	341,267	98,256	88,538	46,311	26,780	1,023,811
June .. ..	422,466	340,147	99,958	88,328	45,818	26,405	1,023,122

6. **Distribution of Employees According to Age.**—The extension of statistics of employment in factories, decided upon at the Conference of Australian Statisticians held in 1945, permits of a distribution of employees (excluding working proprietors) into seven age-groups from 1945-46 onwards, instead of three as in previous years. The particulars are collected as at June. The number employed in each age-group on the last pay-day in June, 1956 and 1957, are given below :—

**FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1956 AND 1957.**

(EXCLUDING WORKING PROPRIETORS.)

Age Group.	June, 1956.			June, 1957.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Under 16 years .. ..	9,061	6,557	15,618	9,158	6,828	15,986
16 years .. ..	13,025	8,163	21,188	13,310	8,292	21,602
17 " .. ..	14,985	9,390	24,375	15,289	9,276	24,565
18 " .. ..	15,348	10,102	25,450	16,104	9,715	25,819
19 " .. ..	14,884	9,072	23,956	15,219	8,986	24,205
20 " .. ..	13,635	7,801	21,436	14,162	7,959	22,121
21 " and over .. ..	697,030	191,463	888,493	696,914	191,910	888,822
<b>Total .. ..</b>	<b>777,968</b>	<b>242,548</b>	<b>1,020,516</b>	<b>780,156</b>	<b>242,966</b>	<b>1,023,122</b>

The following table shows the age distribution in sexes for Australia in June, 1939, and 1957.

**FACTORIES : DISTRIBUTION OF EMPLOYEES IN JUNE, ACCORDING TO AGE, AUSTRALIA.**

(EXCLUDING WORKING PROPRIETORS.)

In June.	Under 16 Years	16 Years.	17 Years.	18 Years.	19 Years.	20 Years.	21 Years and Over.	Total.
<b>MALES.</b>								
1939(a) ..	16,109	76,418					298,436	390,963
1953 ..	9,011	12,451	13,893	13,655	12,383	12,293	627,814	701,500
1954 ..	9,294	12,874	14,947	14,591	12,971	12,426	660,899	738,002
1955 ..	9,093	13,137	14,694	15,341	13,772	12,838	684,613	763,488
1956 ..	9,061	13,025	14,985	15,348	14,884	13,635	697,030	777,968
1957 ..	9,158	13,310	15,289	16,104	15,219	14,162	696,914	780,156
<b>FEMALES.</b>								
1939(a) ..	15,497	56,273					76,831	148,601
1953 ..	6,874	8,303	9,072	9,237	8,623	7,945	161,497	211,551
1954 ..	7,228	8,945	9,899	9,702	8,719	7,807	179,709	232,009
1955 ..	6,605	8,547	9,902	9,994	8,600	7,710	187,171	238,529
1956 ..	6,557	8,163	9,390	10,102	9,072	7,801	191,463	242,548
1957 ..	6,828	8,292	9,276	9,715	8,986	7,959	191,910	242,966
<b>PERSONS.</b>								
1939(a) ..	31,606	132,691					375,267	539,564
1953 ..	15,885	20,754	22,965	22,892	21,006	20,238	789,311	913,051
1954 ..	16,522	21,819	24,846	24,293	21,690	20,233	840,608	970,011
1955 ..	15,698	21,684	24,596	25,335	22,372	20,548	871,784	1,002,017
1956 ..	15,618	21,188	24,375	25,450	23,956	21,436	888,493	1,020,516
1957 ..	15,986	21,602	24,565	25,819	24,205	22,822	888,822	1,023,122

(a) Details for individual ages 16-20 years not available separately.

## § 6. Sex Distribution in Factories.

1. Average Number of Males and Females Employed. The following table shows the average number of males and females employed in factories in each State for 1938-39 and 1952-53 to 1956-57 :—

## FACTORIES : MALES AND FEMALES EMPLOYED.

State.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
MALES.						
New South Wales ..	167,172	291,704	305,040	316,673	327,106	329,386
Victoria ..	136,218	228,724	240,698	251,675	258,006	258,119
Queensland ..	43,941	77,627	81,425	83,290	85,123	85,899
South Australia ..	35,406	67,114	70,657	73,714	76,144	75,543
Western Australia ..	18,704	38,614	40,439	42,294	43,340	42,122
Tasmania ..	11,150	19,621	20,249	21,045	22,128	22,482
<b>Australia ..</b>	<b>412,591</b>	<b>723,404</b>	<b>758,508</b>	<b>788,691</b>	<b>811,847</b>	<b>813,551</b>
FEMALES.						
New South Wales ..	61,609	88,509	97,555	103,137	105,975	106,983
Victoria ..	65,613	82,035	90,579	94,973	97,179	97,085
Queensland ..	10,169	15,496	16,694	17,003	17,350	17,527
South Australia ..	7,965	13,369	14,846	15,851	16,445	16,438
Western Australia ..	4,507	6,574	7,020	7,020	6,768	6,626
Tasmania ..	2,652	3,874	4,340	4,407	4,934	5,188
<b>Australia ..</b>	<b>152,515</b>	<b>209,857</b>	<b>231,034</b>	<b>242,391</b>	<b>248,651</b>	<b>249,847</b>

2. Rate of Variation for each Sex.—The percentages of increase or decrease on the average numbers of males and females employed in the preceding year are shown below for the years 1938-39 and 1952-53 to 1956-57 :—

## FACTORIES : ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES EMPLOYED.

State.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
MALES.						
New South Wales ..	1.69	-4.30	4.57	3.81	3.29	0.70
Victoria ..	0.04	-2.13	5.24	4.56	2.52	0.04
Queensland ..	3.79	-0.06	4.89	2.29	2.20	0.91
South Australia ..	-2.39	-1.37	5.28	4.33	3.30	-0.79
Western Australia ..	-0.30	2.12	4.73	4.59	2.47	-2.81
Tasmania ..	4.40	-1.57	3.20	3.93	5.15	1.60
<b>Australia ..</b>	<b>0.98</b>	<b>-2.50</b>	<b>4.85</b>	<b>3.98</b>	<b>2.94</b>	<b>0.21</b>
FEMALES.						
New South Wales ..	1.88	-12.53	10.22	5.72	2.75	0.95
Victoria ..	-0.03	-9.30	10.42	4.85	2.32	-0.10
Queensland ..	3.96	-7.08	7.73	1.85	2.04	1.02
South Australia ..	1.98	-15.72	11.05	6.77	3.75	-0.04
Western Australia ..	3.06	-9.76	6.78	..	-3.59	-2.10
Tasmania ..	6.51	-5.35	12.03	1.54	11.96	5.15
<b>Australia ..</b>	<b>1.30</b>	<b>-10.91</b>	<b>10.09</b>	<b>4.92</b>	<b>2.58</b>	<b>0.50</b>

NOTE.—Minus sign (-) indicates decrease.

3. **Masculinity of Persons Employed in Factories.**—The extent to which females are employed in the factories of Australia may perhaps be more clearly shown by giving the masculinity of persons employed in each State. The following table shows particulars for the years 1938–39 and 1952–53 to 1956–57 :—

**FACTORIES : MASCULINITY(a) OF PERSONS EMPLOYED.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938–39 .. ..	271	208	432	445	415	420	271
1952–53 .. ..	330	279	501	502	587	506	345
1953–54 .. ..	313	266	488	476	576	467	328
1954–55 .. ..	307	265	490	465	602	478	325
1955–56 .. ..	309	265	491	463	640	448	327
1956–57 .. ..	308	266	490	460	636	433	326

(a) Number of males per 100 females.

For a number of years prior to 1926–27, there were on the average 300 males employed in factories for every 100 females, but by 1932–33, as a result of the particularly severe effect of the depression on the heavier industries where males predominate in number, there were only 239 males employed to every 100 females. With the subsequent recovery of employment in the heavier industries, the proportion of males per 100 females increased to 271 in 1937–38 and 1938–39. The enlistment of men in the armed services and the expansion of industry and the consequential absorption of women brought about by the 1939–45 War caused a decrease in masculinity from 1938–39 to 1943–44. However, following the cessation of hostilities in 1945 and the return of servicemen to civilian life, the number of females employed in factories declined and masculinity increased. In 1956–57, there were 326 males to every 100 females employed in factories.

4. **Employment of Females in Particular Industries.**—(i) *General.* The majority of females in manufacturing industries are employed in four classes, namely :—IV., Industrial Metals, Machines, etc. ; VI., Textiles ; VIII., Clothing ; and IX., Food, Drink and Tobacco. In 1956–57, these industries accounted for 78.37 per cent. of all females in factories. In two classes only did the number of females exceed the number of males, namely, in Class VI., Textiles, where there were 133 females to every 100 males and in Class VIII., Clothing, with 233 females to every 100 males. The following table shows the average number of males and females employed in each of the four classes in 1956–57 :—

**MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1956–57.**

Class.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>MALES.</b>							
IV. Industrial Metals, etc. ..	177,312	116,890	34,242	44,567	18,616	8,541	400,168
VI. Textiles and Textile Goods (not Dress) ..	9,436	16,783	758	1,343	545	1,230	30,095
VIII. Clothing (except Knitted) ..	12,513	14,536	2,466	1,723	1,210	355	32,803
IX. Food, Drink and Tobacco ..	26,982	27,191	22,472	7,892	5,114	3,102	92,753
All Other Classes ..	103,143	82,719	25,961	20,018	16,637	9,254	257,732
<b>Total ..</b>	<b>329,386</b>	<b>258,119</b>	<b>85,899</b>	<b>75,543</b>	<b>42,122</b>	<b>22,482</b>	<b>813,551</b>
<b>FEMALES.</b>							
IV. Industrial Metals, etc. ..	23,904	14,409	2,298	5,242	874	510	47,237
VI. Textiles and Textile Goods (not Dress) ..	13,797	21,162	1,387	1,347	432	1,956	40,081
VIII. Clothing (except Knitted) ..	31,411	32,557	6,069	3,538	2,402	486	76,463
IX. Food, Drink and Tobacco ..	11,819	10,351	3,900	3,141	1,397	1,362	31,970
All Other Classes ..	26,052	18,606	3,873	3,170	1,521	874	54,096
<b>Total ..</b>	<b>106,983</b>	<b>97,085</b>	<b>17,527</b>	<b>16,438</b>	<b>6,626</b>	<b>5,188</b>	<b>249,847</b>

(ii) *Females Employed in Clothing Manufacture.* The employment of females in the several industries of Class VIII., Clothing, the class in which the largest number of females is employed, and the relation of their number to that of the males so employed are shown in the following table.

## EMPLOYMENT IN CLOTHING INDUSTRIES, FEMININITY(a), 1956-57.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Fe- males.	Femi- ninity. (a)	Males.	Fe- males.	Femi- ninity. (a)	Males.	Fe- males.	Femi- ninity. (a)
Tailoring and Ready-made Clothing .. .. .	3,064	14,138	461	2,939	7,224	246	1,089	3,466	318
Waterproof and Oilskin Clothing .. .. .	114	591	518	129	347	269	12	63	525
Dressmaking, Hemstitching Millinery .. .. .	160	1,610	1,006	1,213	7,511	619	151	2,654	1,758
Shirts, Collars, Undercloth- ing .. .. .	248	1,306	527	196	766	391	39	411	1,054
Foundation Garments .. .	454	4,055	893	806	5,819	722	159	1,864	1,172
Handkerchiefs, Ties and Scarves .. .. .	120	1,264	1,053	224	1,532	684	21	157	748
Hats and Caps .. .. .	150	991	661	94	405	431	35	117	334
Gloves .. .. .	484	491	101	213	164	77	26	117	450
Boots and Shoes (not Rub- ber) .. .. .	107	341	319	34	218	641	40	146	365
Boot and Shoe Repairing Umbrellas and Walking Sticks .. .. .	3,435	3,561	104	5,393	5,743	106	1,848	1,452	79
Dyeworks and Cleaning (in- cluding Renovating and Repairing) .. .. .	1,524	110	7	751	43	6	680	56	8
Other .. .. .	191	99	52	422	235	56	39	7	18
Total .. .. .	58	119	205	30	101	337	16	44	275
	2,359	2,369	100	1,980	2,047	103	1,599	1,941	121
	45	366	813	112	402	359	..	..	..
<b>Total .. .. .</b>	<b>12,513</b>	<b>31,411</b>	<b>251</b>	<b>14,536</b>	<b>32,557</b>	<b>224</b>	<b>5,754</b>	<b>12,495</b>	<b>217</b>

(a) Number of females per 100 males.

## § 7. Child Labour in Factories.

1. **Conditions of Child Labour.**—The employment of young persons in factories in the States is regulated by Acts of Parliament, as is the case with the employment of female labour. The object of the restrictions imposed is to ensure, amongst other things, that a proper period shall be devoted to primary education, and that the early years of labour shall not exhaust the worker before the attainment of full growth.

2. **Number of Children Employed, 1939, 1956 and 1957.**—In the returns for the various States, the term "child" denotes any person under sixteen years of age. The decline in the number of children employed from the peak of 33,553 reached in June, 1940, to 15,986 in June, 1957, was probably caused by several factors, including (i) the raising of the school leaving age in New South Wales and Tasmania, (ii) fewer children available for employment owing to the decline in the birth rate and (iii) the high level of employment which enabled parents to keep their children at school beyond the statutory leaving age.

The following table shows the number of children of each sex employed in manufacturing industries in June of the years mentioned.

## FACTORIES : CHILDREN(a) EMPLOYED, JUNE.

State	1939.			1956.			1957.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales	5,759	7,084	12,843	2,538	1,860	4,398	2,584	1,981	4,565
Victoria .. .. .	6,167	5,005	11,172	2,888	2,338	5,226	2,966	2,480	5,446
Queensland .. .. .	1,790	1,334	3,124	1,749	1,199	2,948	1,711	1,205	2,916
South Australia	1,296	1,053	2,349	872	723	1,595	878	724	1,602
Western Australia	705	521	1,226	901	361	1,262	898	327	1,225
Tasmania .. .. .	392	500	892	113	76	189	121	111	232
<b>Australia .. .. .</b>	<b>16,109</b>	<b>15,497</b>	<b>31,606</b>	<b>9,061</b>	<b>6,557</b>	<b>15,618</b>	<b>9,158</b>	<b>6,828</b>	<b>15,986</b>

(a) Under sixteen years of age.

3. **Industries Employing Child Labour.**—The distribution of children employed in factories in June, 1957, and the proportion of children employed to total employees are given in the following table according to the class of industry :—

**FACTORIES : CHILDREN<sup>(a)</sup> EMPLOYED, BY CLASSES, AUSTRALIA, JUNE, 1957.**

Class of Industry.	Children Employed.		Total Employees. (b)		Proportion (per cent.) of Children Employed to Total Employees. (b)	
	Males.	Females.	Males.	Females.	Males.	Females.
Industrial Metals, Machines, Conveyances .. .. .	4,298	765	388,276	47,800	1.11	1.60
Textiles and Textile Goods (not Dress)	502	1,311	29,408	39,491	1.71	3.32
Clothing (except Knitted) .. .. .	536	2,708	27,334	73,621	1.96	3.68
Food, Drink and Tobacco .. .. .	1,094	753	88,365	29,358	1.24	2.56
Sawmills, Joinery, Boxes, etc. .. .. .	690	86	51,504	3,062	1.34	2.81
Furniture of Wood, Bedding, etc. .. .. .	420	62	15,968	3,682	2.63	1.68
Paper, Stationery, Printing, Bookbinding .. .. .	706	594	46,142	16,908	1.53	3.51
All other Industries .. .. .	912	549	133,159	29,044	0.68	1.89
<b>Total .. .. .</b>	<b>9,158</b>	<b>6,828</b>	<b>780,156</b>	<b>242,966</b>	<b>1.17</b>	<b>2.81</b>

(a) Under sixteen years of age.

(b) Excludes working proprietors.

4. **Apprenticeship.**—In all the States, Acts are in force for the regulation of the age at which children may be employed in gainful occupations. Legislative provision is also made for the regulation of apprenticeship under the various State Factories Acts or Arbitration Acts. These Acts, while laying down general principles, leave to the wages tribunals the actual determination of the conditions under which apprentices may be employed.

## § 8. Costs of Production and Value of Output.

Note.—In all tables relating to salaries and wages paid in factories, the amounts drawn by working proprietors are excluded.

1. **General.**—The importance of the manufacturing industries of Australia is indicated by the fact that the total value of their output for 1956–57 was £4,022,413,044, of which £2,247,183,977 was the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £153,110,187 the value of the power, fuel and light used. The difference between the sum of the last two amounts and the value of output, namely, £1,622,119,880, represents the value of production as defined by the Conference of Statisticians at Sydney in 1925, i.e., “the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production.” The total amount of salaries and wages paid in factories in 1956–57 was £891,089,642. This figure, which excludes amounts drawn by working proprietors, was the highest ever recorded and shows an increase of £37,620,170 or 4.41 per cent. on that for the previous year.

2. **Salaries and Wages Paid.**—(i) *In Classes of Industry, 1956–57.* The amounts of salaries and wages paid in the various classes of industry in each State are shown in the following table.

**FACTORIES : SALARIES AND WAGES PAID, 1956-57.**  
(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	7,832	5,919	1,515	1,766	1,263	676	18,971
II. Bricks, Pottery, Glass, etc. ..	10,686	5,126	1,036	1,980	1,161	331	20,320
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	20,064	16,311	1,504	2,969	2,638	754	44,240
IV. Industrial Metals, Machines, Conveyances ..	186,755	116,970	28,099	44,623	15,030	8,436	399,913
V. Precious Metals, Jewellery, Plate ..	1,831	2,108	216	316	149	12	4,632
VI. Textiles and Textile Goods (not Dress) ..	16,904	28,269	1,262	2,025	698	2,044	51,202
VII. Skins and Leather (not Clothing or Footwear) ..	4,448	3,856	974	1,119	518	54	10,969
VIII. Clothing (except Knitted) ..	26,451	30,186	4,277	3,005	1,782	499	66,200
IX. Food, Drink and Tobacco ..	31,696	31,404	21,944	8,357	4,857	3,565	101,823
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	16,027	12,127	7,511	3,858	4,323	2,695	46,541
XI. Furniture of Wood, Bedding, etc. ..	6,390	4,619	1,839	1,460	805	315	15,428
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	24,802	19,552	4,076	3,237	2,019	3,675	57,361
XIII. Rubber ..	7,374	6,534	1,286	944	188	134	16,660
XIV. Musical Instruments ..	1,336	252	27	26	23	..	1,664
XV. Miscellaneous Products ..	7,798	8,008	392	546	251	151	17,146
<i>Total, Classes I. to XV.</i>	<i>370,594</i>	<i>291,241</i>	<i>75,958</i>	<i>76,231</i>	<i>35,705</i>	<i>23,341</i>	<i>873,070</i>
XVI. Heat, Light and Power ..	7,738	5,367	1,822	1,587	1,211	295	18,020
<b>Grand Total ..</b>	<b>378,332</b>	<b>296,608</b>	<b>77,780</b>	<b>77,818</b>	<b>36,916</b>	<b>23,636</b>	<b>891,090</b>

(ii) *Totals and Averages, 1938-39 and 1952-53 to 1956-57.*—The following table shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, for each of the years indicated. The figures exclude working proprietors and the amounts drawn by them :—

**FACTORIES : TOTAL AND AVERAGE SALARIES AND WAGES PAID.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>TOTAL AMOUNT PAID (£'000).</b>							
1938-39 .. ..	44,606	36,027	10,887	8,169	4,574	2,480	106,743
1952-53 .. ..	265,910	210,878	57,591	56,546	28,344	15,976	635,245
1953-54 .. ..	293,586	236,037	63,433	63,110	31,590	17,381	705,137
1954-55 .. ..	326,615	262,750	68,300	70,373	34,738	18,864	781,640
1955-56 .. ..	359,023	286,944	72,460	76,237	37,207	21,598	853,469
1956-57 .. ..	378,332	296,608	77,780	77,818	36,916	23,636	891,090
<b>AVERAGE PER EMPLOYEE (£).</b>							
1938-39 .. ..	201.77	185.64	210.78	195.57	207.90	188.31	196.31
1952-53 .. ..	728.11	709.15	649.94	724.52	664.59	707.89	710.21
1953-54 .. ..	758.65	743.29	678.35	761.27	703.26	734.60	742.62
1954-55 .. ..	804.43	790.00	714.83	810.32	744.17	771.27	789.35
1955-56 .. ..	860.91	841.16	740.93	848.43	785.23	828.65	837.35
1956-57 .. ..	900.06	869.21	789.63	872.87	801.95	886.68	871.98

In comparing the figures in the preceding table, regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, a large number of hands is employed in Class VIII., Clothing, comprising a relatively high percentage of women and children. The highest average wages per employee in 1956-57 were paid in New South Wales, Tasmania and South Australia, in that order.

The average earnings per employee rose annually from 1938-39 to 1943-44 when a level of £291 was attained as a result of war-time conditions. In 1944-45, the average dropped to £285 and remained at this level in 1945-46. From 1945-46, average earnings rose each year and in 1956-57 reached a record level of nearly £872.

(iii) *Total and Average Earnings of Males and Females, 1938-39 and 1952-53 to 1956-57.* Particulars for these years are given in the table on the following page.

**FACTORIES: TOTAL AND AVERAGE SALARIES AND WAGES—MALES AND FEMALES.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>MALES.</b>							
<b>TOTAL AMOUNT PAID (£'000).</b>							
1938-39 .. .. .	38,272	29,006	9,920	7,488	4,129	2,234	91,049
1952-53 .. .. .	224,745	171,897	51,519	50,594	25,756	14,249	538,760
1953-54 .. .. .	245,749	190,573	56,608	56,299	28,684	15,320	593,233
1954-55 .. .. .	274,467	213,377	61,125	62,942	31,748	16,736	660,395
1955-56 .. .. .	302,880	234,784	64,918	68,213	34,236	19,146	724,177
1956-57 .. .. .	318,612	241,587	69,873	69,645	33,895	20,878	754,490
<b>AVERAGE PER MALE EMPLOYEE (£).</b>							
1938-39 .. .. .	239.24	224.47	238.59	220.95	235.49	212.09	231.84
1952-53 .. .. .	793.11	793.11	701.45	779.90	711.80	761.21	782.87
1953-54 .. .. .	844.05	833.71	733.34	824.49	754.20	791.86	820.98
1954-55 .. .. .	906.61	891.40	773.47	883.13	797.80	833.05	877.84
1955-56 .. .. .	967.45	955.00	802.89	925.47	839.62	904.78	933.92
1956-57 .. .. .	1,010.17	981.79	857.48	953.42	856.63	970.11	970.91
<b>FEMALES.</b>							
<b>TOTAL AMOUNT PAID (£'000).</b>							
1938-39 .. .. .	6,334	7,021	967	681	445	246	15,694
1952-53 .. .. .	41,165	38,981	6,072	5,952	2,588	1,727	96,485
1953-54 .. .. .	47,837	45,464	6,825	6,811	2,906	2,061	111,904
1954-55 .. .. .	52,148	49,373	7,175	7,431	2,990	2,128	121,245
1955-56 .. .. .	56,143	52,160	7,542	8,024	2,971	2,452	129,292
1956-57 .. .. .	59,720	55,020	7,907	8,174	3,021	2,758	136,600
<b>AVERAGE PER FEMALE EMPLOYEE (£).</b>							
1938-39 .. .. .	103.66	108.25	96.00	86.44	99.58	93.19	103.92
1952-53 .. .. .	473.28	483.46	400.48	451.80	400.32	448.58	467.79
1953-54 .. .. .	499.19	510.96	418.23	465.95	421.93	477.84	493.10
1954-55 .. .. .	514.94	529.63	431.68	477.12	434.21	487.12	509.56
1955-56 .. .. .	540.06	547.42	445.22	496.84	449.61	500.06	530.23
1956-57 .. .. .	569.11	578.14	464.68	507.53	467.32	537.11	557.95

(iv) *Managers, Clerical Staff and Other Employees.* A further analysis of salaries and wages paid is given in the following table for 1956-57 and shows the amounts paid to managerial and clerical staff, including salaried managers and working directors, chemists, draftsmen and other laboratory and research staff, and those paid to other employees. As previously mentioned, amounts drawn by working proprietors are excluded in all cases.

**FACTORIES: SALARIES AND WAGES PAID TO MANAGERS, CLERICAL STAFF, ETC., AND OTHER EMPLOYEES, AUSTRALIA, 1956-57.**

Class of Industry.	Managers, Clerical Staff, Chemists, Draftsmen, etc.		All Other Employees.	
	Males.	Females.	Males.	Females.
	£'000.	£'000.	£'000.	£'000.
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	2,373	394	16,080	124
II. Bricks, Pottery, Glass, etc. .. .. .	1,776	415	17,391	738
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	9,983	2,079	28,254	3,924
IV. Industrial Metals, Machines, Conveyances .. .. .	56,700	12,160	316,462	14,591
V. Precious Metals, Jewellery, Plate .. .. .	521	203	3,428	480
VI. Textiles and Textile Goods (not Dress) .. .. .	4,553	1,889	24,461	20,299
VII. Skins and Leather (not Clothing or Footwear) .. .. .	1,302	260	7,944	1,463
VIII. Clothing (except Knitted) .. .. .	4,451	2,343	21,048	38,358
IX. Food, Drink and Tobacco .. .. .	13,017	3,652	71,602	13,552
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. .. .	4,765	1,035	40,173	568
XI. Furniture of Wood, Bedding, etc. .. .. .	1,490	453	11,992	1,493
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .. .	7,371	2,423	40,609	6,948
XIII. Rubber .. .. .	2,378	537	12,173	1,572
XIV. Musical Instruments .. .. .	224	80	1,137	223
XV. Miscellaneous Products .. .. .	2,364	776	10,537	3,469
<i>Total, Classes I. to XV.</i> .. .. .	<i>113,268</i>	<i>28,710</i>	<i>623,290</i>	<i>107,802</i>
XVI. Heat, Light and Power .. .. .	1,757	66	16,174	23
<b>Grand Total..</b> .. .. .	<b>115,025</b>	<b>28,776</b>	<b>639,464</b>	<b>107,825</b>
<i>Average paid per employee</i> .. .. .	<i>£.</i>	<i>£.</i>	<i>£.</i>	<i>£.</i>
	1,300.60	603.20	928.57	547.00

3. Power, Fuel and Light Used.—(i) *In Classes of Industry, 1956–57.* The expenditure by factories on power, fuel and light, including the value of lubricants and water, is of considerable importance; in 1956–57 it amounted to a new high level of £153,110,000, an increase of £13,983,000 as compared with the previous year and almost ten times the corresponding value in 1938–39. The following table shows the value of power, fuel and light, etc., used in the different classes of industry:—

**FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED(a), 1956–57.**  
(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>I. Treatment of Non-metalliferous Mine and Quarry Products</b> .. .. .	2,714	1,991	752	888	614	338	7,297
<b>II. Bricks, Pottery, Glass, etc.</b> .. .. .	3,609	1,961	401	561	486	162	7,180
<b>III. Chemicals, Dyes, Explosives, Paints, Oils, Grease</b> .. .. .	5,948	6,196	322	805	1,854	307	15,432
<b>IV. Industrial Metals, Machines, Conveyances</b> .. .. .	27,275	6,212	1,774	5,580	1,008	1,670	43,519
<b>V. Precious Metals, Jewellery, Plate</b> .. .. .	133	136	10	38	11	1	329
<b>VI. Textiles and Textile Goods (not Dress)</b> .. .. .	1,549	2,158	63	216	54	194	4,234
<b>VII. Skins and Leather (not Clothing or Footwear)</b> .. .. .	454	469	79	147	69	6	1,224
<b>VIII. Clothing (except Knitted)</b> .. .. .	891	933	172	132	85	40	2,253
<b>IX. Food, Drink and Tobacco</b> .. .. .	6,027	5,651	2,862	1,267	969	487	17,263
<b>X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving</b> .. .. .	1,460	649	427	165	315	301	3,317
<b>XI. Furniture of Wood, Bedding, etc.</b> .. .. .	168	111	45	39	23	7	393
<b>XII. Paper, Stationery, Printing, Bookbinding, etc.</b> .. .. .	1,284	1,705	136	267	89	1,253	4,734
<b>XIII. Rubber</b> .. .. .	1,027	983	160	114	23	18	2,325
<b>XIV. Musical Instruments</b> .. .. .	78	13		(b)	(b)		92
<b>XV. Miscellaneous Products</b> .. .. .	509	506	11	55	12	4	1,097
<b>Total, Classes I. to XV.</b> .. .. .	53,126	29,674	7,215	10,274	5,612	4,788	110,689
<b>XVI. Heat, Light and Power</b> .. .. .	18,319	10,707	5,915	3,856	3,613	11	42,421
<b>Grand Total</b> .. .. .	71,445	40,381	13,130	14,130	9,225	4,799	153,110

(a) Includes value of lubricants and water.

(b) Less than £500.

(ii) *Values of Items, 1956–57.* The following table shows the values of the various items of power, fuel and light used in factories in each State, during the year:—

**FACTORIES: VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED(a), 1956–57.**  
(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>Coal, Black</b> .. .. .	21,338	2,738	7,134	(b) 4,023	2,646	1,227	39,106
<b>Brown</b> .. .. .	..	7,540	..	..	..	..	7,540
<b>Brown Coal Briquettes</b> .. .. .	..	1,696	..	..	..	..	1,696
<b>Coke</b> .. .. .	12,330	1,121	425	3,205	217	288	17,586
<b>Wood</b> .. .. .	444	637	440	404	421	205	2,551
<b>Fuel Oil</b> .. .. .	8,224	11,616	1,311	2,264	2,104	607	26,126
<b>Tar (Fuel)</b> .. .. .	1,101	257	8	88	36	20	1,510
<b>Electricity</b> .. .. .	19,369	10,841	2,801	3,035	1,934	2,114	40,094
<b>Gas</b> .. .. .	3,251	986	147	229	77	39	4,729
<b>Other (Charcoal, etc.)</b> .. .. .	1,861	833	146	339	1,374	122	4,675
<b>Water</b> .. .. .	2,350	1,314	337	324	216	83	4,624
<b>Lubricating Oils</b> .. .. .	1,177	802	381	219	200	94	2,873
<b>Total</b> .. .. .	71,445	40,381	13,130	14,130	9,225	4,799	153,110

(a) Includes value of lubricants and water.  
of Leigh Creek coal.

(b) Includes £1,044,000, the value of 462,000 tons

(iii) *Quantities of Fuel Used, 1956-57.* The following table shows the quantities of fuel used in factories in each State during the year:—

**FACTORIES : QUANTITIES OF FUEL USED, 1956-57.**

Particulars.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal, Black .. ..	'000 tons	5,560	408	1,639	(a) 955	538	240	9,340
"    Brown .. ..	"	"	9,058	"	"	"	"	9,058
Brown Coal Briquettes..	"	"	347	"	"	"	"	347
Coke .. ..	"	2,033	131	39	335	23	17	2,578
Wood .. ..	"	207	324	225	167	322	91	1,336
Fuel Oil .. ..	'000 gals.	131,171	212,291	15,311	38,538	28,321	7,338	432,970
Tar (Fuel) .. ..	"	34,099	4,985	261	2,184	1,001	420	42,950

(a) Includes 462,000 tons of Leigh Creek coal.

(iv) *Total Value, 1938-39 and 1952-53 to 1956-57.* The next table shows the amounts expended on power, fuel and light during these years:—

**FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED.(a)  
(£'000.)**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1938-39 .. ..	7,652	4,000	1,423	1,018	1,169	438	15,700
1952-53 .. ..	53,630	25,626	9,624	11,806	6,175	2,476	109,337
1953-54 .. ..	58,447	29,080	10,655	12,500	6,972	2,804	120,458
1954-55 .. ..	60,925	31,767	11,620	12,897	8,046	3,127	128,382
1955-56 .. ..	66,469	34,598	11,980	12,830	9,053	4,097	139,027
1956-57 .. ..	71,445	40,381	13,130	14,130	9,225	4,799	153,110

(a) Includes value of lubricants and water.

4. *Value of Materials Used.*—(i) *In Classes of Industry, 1956-57.* The value of materials used (which includes the value of containers, packing, etc., the cost of tools replaced and repairs to plant) in factories in Australia in 1956-57 reached £2,247,183,000, representing 55.9 per cent. of the value of the final output (see para. 5). The following table shows the value of the materials used in various classes of industry in each State:—

**FACTORIES : VALUE OF MATERIALS USED, 1956-57.  
(£'000.)**

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	27,756	11,639	3,572	3,956	2,335	1,175	50,433
II. Bricks, Pottery, Glass, etc. ..	8,844	5,054	855	1,926	752	237	17,668
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	106,365	90,825	7,791	12,688	32,999	1,878	252,546
IV. Industrial Metals, Machines, Conveyances .. ..	395,935	175,401	48,886	89,579	20,553	18,244	748,598
V. Precious Metals, Jewellery, Plate .. ..	1,852	3,156	102	229	71	6	5,416
VI. Textiles and Textile Goods (not Dress) .. ..	42,814	71,068	4,997	4,795	4,450	5,639	133,763
VII. Skins and Leather (not Clothing or Footwear) .. ..	15,111	12,570	3,389	7,126	1,406	240	39,842
VIII. Clothing (except Knitted) ..	44,403	47,648	6,217	3,269	2,093	333	103,963
IX. Food, Drink and Tobacco ..	166,340	174,978	137,672	38,021	27,114	15,606	559,731
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. ..	38,626	24,513	15,321	10,359	7,118	5,632	101,569
XI. Furniture of Wood, Bedding, etc. .. ..	12,722	8,974	3,696	2,668	1,669	463	30,192
XII. Paper, Stationery, Printing, Bookbinding, etc. .. ..	45,374	42,933	6,394	5,273	2,964	6,851	109,789
XIII. Rubber .. ..	18,137	15,455	3,534	1,521	325	187	39,159
XIV. Musical Instruments .. ..	2,989	305	15	6	5	"	3,320
XV. Miscellaneous Products .. ..	12,602	16,815	485	963	257	78	31,200
<i>Total, Classes I. to XV.</i>	939,870	701,334	242,926	182,379	104,111	56,569	2,227,189
XVI. Heat, Light and Power .. ..	8,523	6,395	2,048	1,830	858	340	19,994
<b>Grand Total .. ..</b>	<b>948,393</b>	<b>707,729</b>	<b>244,974</b>	<b>184,209</b>	<b>104,969</b>	<b>56,909</b>	<b>2,247,183</b>

(ii) *Total Amount, 1938-39 and 1952-53 to 1956-57.* The following table shows the value of materials used in factories for these years:—

**FACTORIES : VALUE OF MATERIALS USED.**  
(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 .. ..	120,502	82,971	42,596	20,309	9,604	5,321	281,303
1952-53 .. ..	627,954	476,489	187,572	133,818	63,943	38,029	1,527,805
1953-54 .. ..	721,311	548,111	211,451	152,590	72,468	42,042	1,747,973
1954-55 .. ..	802,617	616,666	224,336	169,136	80,583	47,360	1,940,698
1955-56 .. ..	886,082	674,846	231,584	183,196	96,360	53,751	2,125,819
1956-57 .. ..	948,393	707,729	244,974	184,209	104,969	56,909	2,247,183

5. *Value of Output.*—(i) *In Classes of Industry, 1956-57.* The value of the output of factories in the various classes in each State in 1956-57 is shown in the following table. It represents the selling value at the factory (excluding delivery costs and charges) of goods made or processed during the year, including by-products. In addition, it includes the amount received for other work done such as repair work, assembling and making up for customers. The difference between the sum of the values of the materials and of the power, fuel and light used, and the value of output is the real value of factory production (*see para. 6*).

**FACTORIES : VALUE OF OUTPUT, 1956-57.**  
(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>I. Treatment of Non-metalliferous Mine and Quarry Products .. ..</b>	45,799	24,734	7,479	8,781	5,742	2,690	95,225
<b>II. Bricks, Pottery, Glass, etc. ..</b>	29,297	14,750	3,211	5,796	3,204	856	57,114
<b>III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..</b>	175,055	144,750	12,338	21,460	47,589	3,672	404,864
<b>IV. Industrial Metals, Machines, Conveyances ..</b>	735,809	361,874	94,537	160,790	44,836	35,102	1,432,948
<b>V. Precious Metals, Jewellery, Plate ..</b>	5,167	6,314	446	769	364	31	13,091
<b>VI. Textiles and Textile Goods (not Dress) ..</b>	74,370	123,493	7,543	8,257	5,866	9,937	229,466
<b>VII. Skins and Leather (not Clothing or Footwear) ..</b>	22,157	19,007	4,996	8,884	2,203	342	57,589
<b>VIII. Clothing (except Knitted) ..</b>	88,551	95,936	13,244	7,766	5,092	1,145	211,734
<b>IX. Food, Drink and Tobacco ..</b>	246,534	245,863	183,014	54,388	38,619	23,006	791,424
<b>X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..</b>	68,573	45,216	28,239	16,898	14,831	10,758	184,515
<b>XI. Furniture of Wood, Bedding, etc. ..</b>	23,660	17,224	6,825	5,096	3,063	1,047	56,915
<b>XII. Paper, Stationery, Printing, Bookbinding, etc. ..</b>	92,345	80,931	14,050	11,540	7,063	17,304	223,233
<b>XIII. Rubber ..</b>	30,028	29,035	6,418	3,328	773	432	70,014
<b>XIV. Musical Instruments ..</b>	6,283	651	57	40	38	..	7,069
<b>XV. Miscellaneous Products ..</b>	27,347	32,643	1,158	2,071	693	269	64,181
<b>Total, Classes I. to XV.</b>	<b>1,670,975</b>	<b>1,242,421</b>	<b>383,555</b>	<b>315,864</b>	<b>179,976</b>	<b>106,591</b>	<b>3,899,382</b>
<b>XVI. Heat, Light and Power ..</b>	<b>55,662</b>	<b>33,720</b>	<b>12,949</b>	<b>9,241</b>	<b>7,660</b>	<b>3,799</b>	<b>123,031</b>
<b>Grand Total .. ..</b>	<b>1,726,637</b>	<b>1,276,141</b>	<b>396,504</b>	<b>325,105</b>	<b>187,636</b>	<b>110,390</b>	<b>4,022,413</b>

(ii) *Total, 1938-39 and 1952-53 to 1956-57.* The following table shows the value of output in each State during these years :—

**FACTORIES : VALUE OF OUTPUT.**

(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 .. ..	218,420	152,967	63,321	35,005	19,549	11,158	500,420
1952-53 .. ..	1,139,326	860,147	295,405	234,813	119,310	71,003	2,720,004
1953-54 .. ..	1,299,801	985,505	332,361	265,311	134,587	77,911	3,095,476
1954-55 .. ..	1,446,669	1,100,656	356,017	293,061	149,585	88,601	3,434,589
1955-56 .. ..	1,594,787	1,201,392	371,644	316,962	175,146	103,779	3,763,710
1956-57 .. ..	1,726,637	1,276,141	396,504	325,105	187,636	110,390	4,022,413

6. *Value of Production.*—(i) *In Classes of Industry, 1956-57.* The value of production for any industry was defined at the Conference of Statisticians at Sydney in 1925 as “ the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production. ”

In accordance with this definition, it was agreed that a deduction consisting of the costs of raw material, containers, power, fuel, light, lubricants, water, tools replaced, repairs to plant and depreciation should be made from the “ value of output ”. All these deductions with the exception of depreciation are included in the items “ value of materials used ” and “ value of fuel used ” as defined above. On account of the difficulty experienced in securing accurate figures for depreciation, it was agreed that no deduction should be made on this account. The value of production as given in the following tables is obtained therefore, by deducting only “ value of materials used ” and “ value of fuel used ” from the “ value of output ”.

It must not be inferred that, when wages and salaries are deducted from the value of production, the whole of the “ surplus ” is available for interest and profit, as many miscellaneous expenses such as taxation, insurance, advertising and other sundry charges also have to be taken into account.

The value of factory production, therefore, approximates “ net value added ” in the manufacturing process. It amounted in 1956-57 to £1,622 million to which Class IV., Industrial Metals, etc., with £641 million made the greatest contribution. The total value of production in 1956-57 showed an increase of £121 million (8.16 per cent.) over the figure for 1955-56 and £1,419 million over the value of production recorded in 1938-39.

The following table shows the value of production in 1956-57 in each State for the various classes of industry.

**FACTORIES : VALUE OF PRODUCTION, 1956-57.**  
(‘000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>I. Treatment of Non-metalliferous Mine and Quarry Products .. ..</b>	15,329	11,104	3,155	3,937	2,793	1,177	37,495
<b>II. Bricks, Pottery, Glass, etc. ..</b>	16,844	7,735	1,955	3,309	1,966	457	32,266
<b>III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..</b>	62,742	47,729	4,225	7,967	12,736	1,487	136,886
<b>IV. Industrial Metals, Machines, Conveyances ..</b>	312,599	180,261	43,877	65,631	23,275	15,188	640,831
<b>V. Precious Metals, Jewellery, Plate ..</b>	3,182	3,022	334	502	282	24	7,346
<b>VI. Textiles and Textile Goods (not Dress) ..</b>	30,007	50,267	2,483	3,246	1,362	4,104	91,469
<b>VII. Skins and Leather (not Clothing or Footwear) ..</b>	6,592	5,968	1,528	1,611	728	96	16,523
<b>VIII. Clothing (except Knitted) ..</b>	43,257	47,355	6,855	4,365	2,914	772	105,518
<b>IX. Food, Drink and Tobacco ..</b>	74,167	65,234	42,480	15,100	10,536	6,913	214,430
<b>X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..</b>	28,487	20,054	12,491	6,374	7,398	4,825	79,629
<b>XI. Furniture of Wood, Bedding, etc. ..</b>	10,770	8,139	3,084	2,389	1,371	577	26,330
<b>XII. Paper, Stationery, Printing, Bookbinding, etc. ..</b>	45,687	36,293	7,520	6,000	4,010	9,200	108,710
<b>XIII. Rubber ..</b>	10,864	12,597	2,724	1,693	425	227	28,530
<b>XIV. Musical Instruments ..</b>	3,216	333	41	34	33	..	3,657
<b>XV. Miscellaneous Products ..</b>	14,236	15,322	662	1,053	424	187	31,884
<i>Total, Classes I. to XV.</i>	<i>677,979</i>	<i>511,413</i>	<i>133,414</i>	<i>123,211</i>	<i>70,253</i>	<i>45,234</i>	<i>1,561,504</i>
<b>XVI. Heat, Light and Power ..</b>	28,820	16,618	4,986	3,555	3,189	3,448	60,616
<b>Grand Total ..</b>	<b>706,799</b>	<b>528,031</b>	<b>138,400</b>	<b>126,766</b>	<b>73,442</b>	<b>48,682</b>	<b>1,622,520</b>

(ii) *Total and Averages, 1938-39 and 1952-53 to 1956-57.* The value of production and the amount per person employed and per head of population are shown in the following table. For Australia as a whole, the value of production per head of population increased from £29.34 in 1938-39 to £170.12 in 1956-57. For value per person employed, the increase was not quite so pronounced (from £360 per head in 1938-39 to £1,525 in 1956-57).

**FACTORIES : VALUE OF PRODUCTION.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
VALUE. (£'000.)							
1938-39 .. ..	90,266	65,996	19,302	13,678	8,776	5,399	203,417
1952-53 .. ..	457,742	358,032	98,209	89,189	49,192	30,498	1,082,862
1953-54 .. ..	520,043	408,314	110,255	100,221	55,147	33,065	1,227,045
1954-55 .. ..	583,127	452,223	120,061	111,028	60,956	38,114	1,365,509
1955-56 .. ..	642,136	491,948	128,080	120,936	69,733	45,931	1,498,764
1956-57 .. ..	706,799	528,031	138,400	126,766	73,442	48,682	1,622,120

**PER PERSON EMPLOYED. (£.)**

1938-39 .. ..	395	327	357	315	378	391	360
1952-53 .. ..	1,204	1,152	1,055	1,108	1,089	1,298	1,160
1953-54 .. ..	1,292	1,233	1,124	1,172	1,162	1,345	1,240
1954-55 .. ..	1,389	1,305	1,197	1,240	1,236	1,497	1,324
1955-56 .. ..	1,487	1,385	1,250	1,306	1,392	1,697	1,415
1956-57 .. ..	1,620	1,487	1,343	1,378	1,507	1,759	1,525

**PER HEAD OF POPULATION. (£.)**

1938-39 .. ..	33.00	35.25	19.14	22.98	18.80	22.72	29.34
1952-53 .. ..	133.84	151.55	78.64	119.00	80.28	98.72	123.79
1953-54 .. ..	152.70	168.53	84.78	127.50	87.44	106.85	137.86
1954-55 .. ..	168.56	181.75	90.59	137.50	93.93	121.78	150.22
1955-56 .. ..	182.75	191.80	94.69	144.93	104.23	143.90	161.10
1956-57 .. ..	196.99	200.00	100.26	147.17	107.29	149.27	170.12

7. Value of Output and Cost of Production.—As the total value of the output for Australia for 1956-57 was recorded as £4,022,413,000, there remained, after payment of £2,247,183,000 for the value of the materials used, £891,090,000 for salaries and wages and £153,110,000 for power, fuel and light, a balance of £731,030,000 to provide for all other costs and overhead expenses such as rent, interest, insurance, pay-roll tax, income tax, depreciation, etc., as well as drawings by working proprietors and profit. The following table gives corresponding particulars for each State for the year 1956-57:—

FACTORIES : VALUE OF OUTPUT AND COST OF PRODUCTION, 1956-57.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	Balance. (Output less Materials, Fuel and Wages.)(c)	Total Value of Output.
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VALUE AND COST, ETC.  
(£'000.)

New South Wales .. ..	948,393	71,445	378,332	328,469	1,726,637
Victoria .. ..	707,729	40,381	296,608	231,423	1,276,141
Queensland .. ..	244,974	13,130	77,780	60,620	396,504
South Australia .. ..	184,209	14,130	77,818	48,948	325,105
Western Australia .. ..	104,969	9,225	36,916	36,526	187,636
Tasmania .. ..	56,909	4,799	23,636	25,046	110,390
<b>Australia .. ..</b>	<b>2,247,183</b>	<b>153,110</b>	<b>891,090</b>	<b>731,030</b>	<b>4,022,413</b>

(a) Includes the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.  
 (b) Includes lubricants and water. (c) See paragraph preceding this table.

§ 9. Value of Land, Buildings, Plant and Machinery.

1. General.—The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1956-57:—

FACTORIES : VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a), 1956-57.  
(£'000.)

Value of—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Land and buildings	303,981	252,024	58,654	55,343	35,520	56,473	761,995
Plant and machinery	363,310	290,785	89,904	71,847	63,272	44,836	923,954
<b>Total ..</b>	<b>667,291</b>	<b>542,809</b>	<b>148,558</b>	<b>127,190</b>	<b>98,792</b>	<b>101,309</b>	<b>1,685,949</b>

(a) Includes estimated value of rented premises and plant.

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation, but they include estimates of the capital value of premises and plant rented. The totals shown in the table consequently do not represent the actual amount of capital invested in the items specified.

2. Value of Land and Buildings.—(i) Total for Australia. The following table shows, for Australia as a whole, the approximate value of land and buildings occupied in connexion with manufacturing industries for 1938-39 and 1951-52 to 1956-57.

**FACTORIES : VALUE OF LAND AND BUILDINGS(a), AUSTRALIA.**  
(£'000.)

Class of Industry.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
<b>I. Treatment of Non-metalliferous Mine and Quarry Products</b> ..	2,779	7,431	8,091	9,103	11,228	12,686
<b>II. Bricks, Pottery, Glass, etc.</b> ..	2,953	7,723	8,535	9,849	11,301	14,498
<b>III. Chemicals, Dyes, Explosives, Paints, Oils, Grease</b> ..	7,377	30,996	36,931	44,658	61,863	67,719
<b>IV. Industrial Metals, Machines, Conveyances</b> ..	34,841	137,724	159,325	184,934	218,667	252,837
<b>V. Precious Metals, Jewellery, Plate</b> ..	633	2,311	2,523	2,888	3,233	3,525
<b>VI. Textiles and Textile Goods (not Dress)</b> ..	6,000	22,482	25,443	29,651	31,931	37,010
<b>VII. Skins and Leather (not Clothing or Footwear)</b> ..	2,096	5,734	6,072	6,452	6,288	7,074
<b>VIII. Clothing (except Knitted)</b> ..	10,624	26,359	28,584	31,163	33,920	37,203
<b>IX. Food, Drink and Tobacco</b> ..	33,273	78,278	86,625	94,070	108,335	118,413
<b>X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving</b> ..	4,107	16,361	18,297	21,225	23,141	25,347
<b>XI. Furniture of Wood, Bedding, etc.</b> ..	2,533	7,256	8,069	8,981	9,915	11,223
<b>XII. Paper, Stationery, Printing, Book-binding, etc.</b> ..	10,639	27,284	30,444	34,156	40,256	44,912
<b>XIII. Rubber</b> ..	1,676	5,530	6,668	7,430	8,581	9,563
<b>XIV. Musical Instruments</b> ..	105	398	468	528	621	987
<b>XV. Miscellaneous Products</b> ..	1,433	6,705	7,570	8,299	9,946	11,491
<b>Total, Classes I. to XV.</b> ..	121,069	382,572	433,645	493,387	579,226	654,488
<b>XVI. Heat, Light and Power</b> ..	9,851	31,874	49,786	62,609	76,356	107,507
<b>Grand Total</b> ..	130,920	414,446	483,431	555,996	655,582	761,995

(a) Includes estimated value of rented premises.

(ii) *In Classes of Industry in States, 1956-57.* The following table gives particulars of the various classes of industry in each State.

**FACTORIES : VALUE OF LAND AND BUILDINGS(a), 1956-57.**  
(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>I. Treatment of Non-metalliferous Mine and Quarry Products</b> ..	4,749	3,937	844	1,028	1,457	671	12,686
<b>II. Bricks, Pottery, Glass, etc.</b> ..	7,794	3,401	743	1,043	1,274	243	14,498
<b>III. Chemicals, Dyes, Explosives, Paints, Oils, Grease</b> ..	32,930	24,964	1,394	2,740	4,652	1,039	67,719
<b>IV. Industrial Metals, Machines, Conveyances</b> ..	109,591	85,848	15,295	23,092	10,714	8,297	252,837
<b>V. Precious Metals, Jewellery, Plate</b> ..	1,246	1,704	122	258	172	23	3,525
<b>VI. Textiles and Textile Goods (not Dress)</b> ..	12,098	20,803	733	1,649	670	1,057	37,010
<b>VII. Skins and Leather (not Clothing or Footwear)</b> ..	2,832	2,859	354	631	287	111	7,074
<b>VIII. Clothing (except Knitted)</b> ..	15,386	15,329	2,474	1,943	1,559	512	37,203
<b>IX. Food, Drink and Tobacco</b> ..	37,885	39,343	20,055	9,270	7,339	4,521	118,413
<b>X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving</b> ..	10,173	6,976	2,384	2,656	1,856	1,302	25,347
<b>XI. Furniture of Wood, Bedding, etc.</b> ..	4,295	3,709	1,357	850	759	253	11,223
<b>XII. Paper, Stationery, Printing, Bookbinding, etc.</b> ..	19,115	15,578	2,818	2,198	1,392	3,811	44,912
<b>XIII. Rubber</b> ..	3,691	3,927	1,022	540	262	121	9,563
<b>XIV. Musical Instruments</b> ..	790	150	9	15	23	..	987
<b>XV. Miscellaneous Products</b> ..	5,095	5,372	271	377	290	86	11,491
<b>Total, Classes I. to XV.</b> ..	267,670	233,900	49,875	48,290	32,706	22,047	654,488
<b>XVI. Heat, Light and Power</b> ..	36,311	18,124	8,779	7,053	2,814	34,426	107,507
<b>Grand Total</b> ..	303,981	252,024	58,654	55,343	35,520	56,473	761,995

(a) Includes estimated value of rented premises.

(iii) *Totals in each State.* The following table shows the value of land and buildings in each State for the years 1938-39 and 1952-53 to 1956-57 :—

**FACTORIES : VALUE OF LAND AND BUILDINGS.(a)**

(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 .. ..	57,353	42,026	12,299	8,711	6,814	3,717	130,920
1952-53 .. ..	176,576	135,324	34,720	31,904	20,960	14,962	414,446
1953-54 .. ..	196,724	158,389	40,003	36,579	24,739	26,997	483,431
1954-55 .. ..	221,519	186,324	46,187	42,133	30,230	29,603	555,996
1955-56 .. ..	260,268	214,921	52,602	48,353	32,859	46,579	655,582
1956-57 .. ..	303,981	252,024	58,654	55,343	35,520	56,473	761,995

(a) Includes estimated value of rented premises.

Prior to 1929-30, the increase in the value of land and buildings was uninterrupted, rising from £23 million in 1903 to £118 million in 1929-30, an increase of £95 million in 27 years. During the three years ended 1932-33, there was a decline of £12 million to £105.8 million, but since that year the value has risen annually and it stood at £762.0 million in 1956-57.

3. *Value of Plant and Machinery.*—(i) *Total for Australia, 1938-39 and 1952-53 to 1956-57.* The following table shows for Australia the approximate value of plant and machinery used in factories.

**FACTORIES : VALUE OF PLANT AND MACHINERY(a), AUSTRALIA.**

(£'000.)

Class of Industry.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	7,028	16,155	17,829	20,625	23,512	27,351
II. Bricks, Pottery, Glass, etc. ..	3,145	8,811	9,741	11,000	12,319	13,138
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	6,754	39,024	53,528	97,508	125,016	127,732
IV. Industrial Metals, Machines, Conveyances ..	33,038	131,857	148,178	168,651	202,286	251,161
V. Precious Metals, Jewellery, Plate	197	1,012	1,002	1,094	1,219	1,374
VI. Textiles and Textile Goods (not Dress) ..	6,658	25,030	27,567	29,658	31,155	32,570
VII. Skins and Leather (not Clothing or Footwear) ..	973	3,894	4,034	4,153	4,225	4,332
VIII. Clothing (except Knitted) ..	2,557	11,181	12,363	13,452	14,340	15,699
IX. Food, Drink and Tobacco ..	32,101	77,512	90,624	101,700	115,904	124,406
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	3,907	17,851	19,002	21,827	23,626	25,045
XI. Furniture of Wood, Bedding, etc.	728	2,692	2,870	3,186	3,388	3,632
XII. Paper, Stationery, Printing, Book- binding, etc. ..	9,188	38,129	41,866	46,129	51,405	53,755
XIII. Rubber ..	1,368	4,875	5,677	6,843	8,971	8,626
XIV. Musical Instruments ..	12	305	458	444	509	682
XV. Miscellaneous Products ..	758	5,075	5,968	6,614	7,459	8,515
<i>Total, Classes I. to XV. ..</i>	<i>108,412</i>	<i>383,403</i>	<i>440,707</i>	<i>532,884</i>	<i>625,334</i>	<i>698,018</i>
XVI. Heat, Light and Power ..	35,250	110,131	140,008	165,408	178,206	225,936
<b>Grand Total .. ..</b>	<b>143,662</b>	<b>493,534</b>	<b>580,715</b>	<b>698,292</b>	<b>803,540</b>	<b>923,954</b>

(a) Includes estimated value of rented plant and machinery.

Except for the years 1930-31 to 1933-34, when decreases were recorded, there has been a continuous increase in the value of plant and machinery in factories in Australia. The increase in 1956-57 of £210.4 million over 1955-56 extended over all industrial classes except Class XIII. Rubber. The greatest increase occurred in Class IV., Industrial Metals, Machines, Conveyances.

(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the years 1938–39 and 1952–53 to 1956–57. During 1956–57, increases occurred in all States, New South Wales showing the largest increase, £64.4 million.

**FACTORIES : VALUE OF PLANT AND MACHINERY.(a)**  
(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938–39 .. ..	62,693	38,627	18,095	9,750	8,095	6,402	143,662
1952–53 .. ..	207,733	147,365	51,670	40,111	24,035	22,620	493,534
1953–54 .. ..	233,022	181,058	64,160	46,788	28,195	27,492	580,715
1954–55 .. ..	258,596	226,347	76,367	52,145	54,958	29,879	698,292
1955–56 .. ..	298,913	258,295	85,777	63,596	56,534	40,425	803,540
1956–57 .. ..	363,310	290,785	89,904	71,847	63,272	44,836	923,954

(a) Includes estimated value of rented plant and machinery.

(iii) *Value according to Class of Industry, 1956–57.* The following table shows the value of plant and machinery used in factories in each State during 1956–57 according to class of industry.

**FACTORIES : VALUE OF PLANT AND MACHINERY(a), 1956-57.**  
(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	12,439	6,174	2,421	3,614	1,980	723	27,351
II. Bricks, Pottery, Glass, etc. ..	6,849	3,054	970	857	1,206	202	13,138
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	45,785	48,540	1,923	5,808	22,889	2,787	127,732
IV. Industrial Metals, Machines, Conveyances ..	135,898	62,505	10,307	23,363	8,949	10,139	251,161
V. Precious Metals, Jewellery, Plate ..	547	625	40	105	49	8	1,374
VI. Textiles and Textile Goods (not Dress) ..	10,725	17,948	910	1,091	402	1,494	32,570
VII. Skins and Leather (not Clothing or Footwear) ..	1,749	1,479	404	474	194	32	4,332
VIII. Clothing (except Knitted) ..	5,545	7,234	1,241	898	579	202	15,699
IX. Food, Drink and Tobacco ..	34,393	35,587	36,635	8,293	5,905	3,593	124,406
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	8,709	5,401	3,754	2,165	2,496	2,520	25,045
XI. Furniture of Wood, Bedding, etc. ..	1,287	1,129	481	405	255	75	3,632
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	17,398	21,124	2,911	2,741	1,672	7,909	53,755
XIII. Rubber ..	3,079	4,202	653	441	156	95	8,626
XIV. Musical Instruments ..	560	114	5	1	2	..	682
XV. Miscellaneous Products ..	3,427	4,510	138	332	82	26	8,515
<i>Total, Classes I. to XV. ..</i>	<i>288,390</i>	<i>219,626</i>	<i>62,793</i>	<i>50,588</i>	<i>46,816</i>	<i>29,805</i>	<i>698,018</i>
XVI. Heat, Light and Power ..	74,920	71,159	27,111	21,259	16,456	15,031	225,936
<b>Grand Total .. ..</b>	<b>363,310</b>	<b>290,785</b>	<b>89,904</b>	<b>71,847</b>	<b>63,272</b>	<b>44,836</b>	<b>923,954</b>

(a) Includes estimated value of rented plant and machinery.

4. *Depreciation of Land and Buildings and Plant and Machinery, 1956-57.*—The following table shows the allowance made for the depreciation of land and buildings and plant and machinery used in connexion with the manufacturing industries in each State as recorded by factory proprietors at the annual census of factory production.

FACTORIES : ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND PLANT AND MACHINERY, 1956-57.

(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	1,361	540	261	367	170	67	2,766
II. Bricks, Pottery, Glass, etc. ..	729	350	126	89	123	27	1,444
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	4,641	4,973	258	691	2,422	404	13,389
IV. Industrial Metals, Machines, Conveyances ..	12,167	6,208	949	2,688	610	782	23,404
V. Precious Metals, Jewellery, Plate ..	38	48	3	8	3	..	100
VI. Textiles and Textile Goods (not Dress) ..	1,091	2,194	80	69	51	187	3,672
VII. Skins and Leather (not Clothing or Footwear) ..	123	105	27	33	20	2	310
VIII. Clothing (except Knitted) ..	499	620	86	57	47	22	1,331
IX. Food, Drink and Tobacco ..	3,172	3,507	2,995	779	566	351	11,370
X. Sawmills, Joinery, Boxes, etc. Wood Turning and Carving	816	537	349	218	248	285	2,453
XI. Furniture of Wood, Bedding, etc. ..	123	76	49	30	23	6	307
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	1,546	2,332	290	240	178	798	5,384
XIII. Rubber ..	799	695	131	103	19	11	1,758
XIV. Musical Instruments ..	58	10	..	..	..	..	68
XV. Miscellaneous Products ..	422	568	13	33	10	3	1,049
<i>Total, Classes I. to XV.</i>	<i>27,585</i>	<i>22,763</i>	<i>5,617</i>	<i>5,405</i>	<i>4,490</i>	<i>2,945</i>	<i>68,805</i>
XVI. Heat, Light and Power ..	6,326	743	1,468	694	764	298	10,293
<b>Grand Total ..</b>	<b>33,911</b>	<b>23,506</b>	<b>7,085</b>	<b>6,099</b>	<b>5,254</b>	<b>3,243</b>	<b>79,098</b>

5. Land and Buildings, Plant and Machinery—Values, Additions and Replacements, Depreciation, 1938-39 and 1952-53 to 1956-57.—The following table summarizes the recorded totals for Australia in this section and also includes particulars of additions and replacements.

FACTORIES : VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY, AUSTRALIA.

(£'000.)

Year.	Book Values as at 30th June.(a)		Additions and Replacements during year.(a)		Depreciation allowed during year.	
	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.
1938-39 ..	130,920	143,662	5,578	17,781	1,911	8,736
1952-53 ..	414,446	493,534	48,006	119,790	4,683	33,039
1953-54 ..	483,431	580,715	55,668	128,453	5,673	41,524
1954-55 ..	555,996	698,292	58,311	170,762	6,568	49,916
1955-56 ..	655,582	803,540	82,808	156,535	8,030	59,909
1956-57 ..	761,995	923,954	87,441	195,670	9,196	69,902

(a) Includes estimated value of rented premises, plant and machinery.

## § 10. Principal Factory Products.

The factory production of certain commodities is shown in the monthly and quarterly publications of this Bureau and in the bulletin *Secondary Industries*.

The following table shows the total recorded production of some of the principal articles manufactured in Australia during the years ended 30th June, 1955 to 1957. A more complete list, together with values, where available, is published in the bulletin *Secondary Industries*.

## QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES : AUSTRALIA.

Article.	Unit of Quantity.	1954-55.	1955-56.	1956-57.
Acid—				
Nitric .. .. .	Ton	11,777	14,216	15,520
Sulphuric .. .. .	"	835,146	896,472	878,763
Aerated and Carbonated Waters .. .. .	'000 gals.	59,648	60,891	61,242
Asbestos Cement Building Sheets .. .. .	'000 sq. yds.	28,077	26,679	25,444
Bacon and Ham .. .. .	'000 lb.	78,820	75,641	71,156
Bags, Leather, Fibre, etc.—				
Handbags—				
Leather .. .. .	No.	935,001	848,144	748,571
Plastic .. .. .	"	591,485	800,217	922,068
Other .. .. .	"	125,298	122,228	103,308
School Bags .. .. .	"	104,993	102,338	92,955
Suitcases(a) .. .. .	"	1,241,906	1,311,676	1,196,585
Trunks .. .. .	"	1,348	1,204	1,256
All other .. .. .	"	335,575	292,042	339,245
Baking Powder .. .. .	lb.	701,395	617,101	650,272
Bath Heaters—				
Electric .. .. .	No.	17,886	17,076	14,698
Gas .. .. .	"	27,626	27,560	25,243
Solid Fuel .. .. .	"	41,191	40,532	33,691
Bathing Suits .. .. .	Doz.	222,473	228,089	165,741
Baths, C.I.P.E. .. .. .	No.	117,414	104,998	88,959
Batteries, Wet Cell type .. .. .	"	1,501,788	1,403,127	1,433,165
Beer (excluding Waste Beer) .. .. .	'000 gals.	221,679	227,496	220,728
Biscuits .. .. .	'000 lb.	150,816	158,554	162,536
Blankets .. .. .	'000	1,532	1,554	1,678
Boots, Shoes and Slippers (not Rubber)—				
Boots and Shoes .. .. .	'000 pairs	17,901	18,006	18,930
Sandals .. .. .	"	1,980	1,809	1,932
Slippers .. .. .	"	7,324	7,977	7,684
Bran (Wheat) .. .. .	Ton (2,000 lb.)	272,455	277,638	281,915
Brassieres .. .. .	Doz.	404,893	421,142	423,441
Bricks, Clay .. .. .	'000	838,579	840,343	805,069
Brooms .. .. .	Gross	19,715	19,862	21,003
Brushes (b) .. .. .	"	86,531	87,594	78,753
Butter .. .. .	Ton	188,010	205,791	189,841
Candles .. .. .	Cwt.	10,369	10,011	10,354
Cardigans, Sweaters, etc. .. .. .	Doz.	1,029,250	1,051,285	1,148,779
Cement, Portland .. .. .	Ton.	1,919,802	2,034,554	2,172,518
Cheese .. .. .	"	45,178	38,681	45,171
Cigarettes .. .. .	'000 lb.	22,859	27,162	30,513
Cleansing and Scouring Powders—				
Soap based (Incl. Sand Soap) .. .. .	Cwt.	115,350	105,046	78,168
Other .. .. .	"	43,823	72,230	101,184
Cloth—				
Cotton .. .. .	'000 sq. yds.	34,424	40,151	46,564
Woolen and Worsted (c) .. .. .	"	31,067	30,279	32,782
Coke—				
Metallurgical .. .. .	Ton	2,046,790	2,058,426	2,234,458
Other .. .. .	"	1,099,859	1,031,135	892,668
Confectionery—				
Chocolate .. .. .	'000 lb.	56,994	62,405	68,810
Other .. .. .	"	81,506	83,069	87,395
Coppers—				
Electric .. .. .	No.	28,381	27,075	21,890
Gas .. .. .	"	27,400	27,480	24,170
Inserts (all types) .. .. .	"	86,487	68,827	50,653
Cordials and Syrups .. .. .	'000 gals.	4,537	4,596	4,623
Corsets and Corselets .. .. .	Doz.	141,265	156,837	145,414
Cosmetic Creams and Lotions—				
Face Creams .. .. .	Cwt.	5,110	4,706	4,488
Hand Creams and Lotions .. .. .	"	6,175	7,141	8,939
Other Skin Creams and Lotions .. .. .	"	8,221	6,066	6,865
Custard Powder .. .. .	'000 lb.	5,535	5,942	5,637
Cycles, Assembled .. .. .	No.	91,125	89,033	74,734

(a) Includes kitbags.

(b) Excludes tooth and industrial metal and bristle brushes.

(c) Includes mixtures.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES :  
AUSTRALIA—continued.

Article.	Unit of Quantity.	1954-55.	1955-56.	1956-57.
Dynamos—				
Alternators .. .. .	No.	264	289	389
Generators .. .. .	"	8,473	6,394	6,585
Electricity .. .. .	Mill. kWh	15,202	16,675	18,289
Enamels, Natural and Synthetic .. .. .	'000 gals.	3,642	4,126	4,255
Engines—				
Diesel, other than Marine .. .. .	No.	2,667	2,757	2,642
Petrol—				
Marine .. .. .	"	1,380	1,246	1,780
Other (a) .. .. .	"	45,608	100,585	180,509
Essences, Flavouring—				
Domestic .. .. .	Gal.	116,577	118,642	120,714
Industrial .. .. .	"	270,348	319,591	345,999
Face Powder .. .. .	Cwt.	4,336	2,694	2,721
Fans, Electric .. .. .	No.	63,265	127,659	139,819
Fats, Edible—				
Dripping .. .. .	Cwt.	367,517	360,835	418,634
Other .. .. .	"	291,989	369,712	392,169
Fibrous Plaster Sheets .. .. .	'000 sq. yds.	17,784	18,125	16,257
Fish, Tinned (including Fish Loaf) .. .. .	'000 lb.	6,646	6,008	8,268
Floorboards—				
Australian Timber .. .. .	'000 super. ft.	115,640	118,502	124,056
Imported Timber .. .. .	"	4,474	2,973	2,656
Flour, Self-raising .. .. .	Cwt.	1,102,480	1,090,005	1,109,307
Flour, Wheaten (b) .. .. .	Ton (2,000 lb.)	1,553,019	1,571,305	1,631,827
Fruit Juices—Natural .. .. .	'000 gals.	2,874	3,016	3,298
Gas .. .. .	Mill. cubic ft.	43,465	44,578	46,653
Gloves—				
Dress—				
Leather .. .. .	Doz. pairs	6,454	4,115	4,111
Other .. .. .	"	58,749	52,035	70,654
Work, all types .. .. .	"	269,408	293,874	276,707
Golf Clubs .. .. .	Doz.	14,861	12,781	12,443
Handkerchiefs—				
Men's .. .. .	"	1,313,327	1,181,261	1,118,023
Women's .. .. .	"	1,375,669	1,264,711	1,489,780
Hats and Caps .. .. .	"	510,382	483,817	503,240
Hose, Rubber—Garden .. .. .	'000 lin. ft.	5,071	3,131	3,755
Other .. .. .	"	9,716	9,449	9,654
Plastic—Garden .. .. .	"	24,893	25,475	27,585
Ice .. .. .	Ton	766,557	601,027	485,511
Ice Cream .. .. .	'000 gals.	14,796	16,018	15,647
Iron and Steel—				
Pig Iron .. .. .	'000 tons	1,869	1,911	2,098
Steel Ingots .. .. .	"	2,209	2,320	2,774
Blooms and Billets .. .. .	"	1,953	2,111	2,288
Irons, Electric (Hand, Domestic) .. .. .	No.	278,777	327,536	354,099
Jams .. .. .	'000 lb.	81,699	84,096	92,208
Jelly Crystals .. .. .	"	11,799	12,793	12,332
Kalsomine .. .. .	"	3,089	1,918	1,496
Lacquer, Clear and Colours .. .. .	Gal.	1,476,489	1,498,695	1,451,292
Lard .. .. .	Cwt.	40,472	42,446	42,762
Lawn Mowers—				
Electric .. .. .	No.	25,418	18,861	4,496
Petrol .. .. .	"	29,423	77,929	158,254
Hand .. .. .	"	106,005	106,712	48,713
Leather—				
Dressed from Hides—Sold by Measurement .. .. .	'000 sq. ft.	54,069	55,126	56,611
Sold by Weight .. .. .	'000 lb.	208	132	162
Dressed from Skins .. .. .	'000 sq. ft.	25,641	23,883	21,978
Harness, Skirt, etc. .. .. .	'000 lb.	1,433	1,213	2,553
Sole and Belting .. .. .	"	35,001	33,701	30,583
Upholstery .. .. .	'000 sq. ft.	7,103	3,389	1,434
Lime—Agricultural .. .. .	Ton	111,170	123,338	120,298
Hydrated .. .. .	"	48,644	54,172	52,843
Quick .. .. .	"	128,639	117,578	109,667
Linseed Oil—extracted from Local Crushing .. .. .	'000 gals.	438	1,448	1,645
from treatment of Unrefined .. .. .	"	3,539	2,631	2,326
Lubricating Oil .. .. .	tons	64,465	67,531	75,339

(a) Excludes motor car, motor cycle, tractor and aero engines. baking and sharps.

(b) Includes wheatmeal for

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES :  
AUSTRALIA—continued.

Article.	Unit of Quantity.	1954-55.	1955-56.	1956-57.
Malt, Barley .. .. .	'000 bus.	7,517	7,782	7,895
Margarine—				
Table .. .. .	'000 lb.	21,972	26,552	38,632
Other .. .. .	"	49,171	43,443	44,576
Mattresses—Wire .. .. .	No.	315,741	296,494	286,191
Inner Spring .. .. .	"	476,395	501,106	507,844
Soft Filled, etc. .. .. .	"	380,465	362,937	337,017
Meat, Tinned .. .. .	'000 lb.	165,394	157,969	154,731
Milk—				
Concentrated (Whole) .. .. .	"	22,560	31,038	33,924
Condensed .. .. .	"	86,225	99,368	110,995
Powdered (Whole) (a) .. .. .	"	59,269	67,361	70,404
Mops, Floor .. .. .	Gross	13,914	13,768	11,929
Motor Bodies made .. .. .	No.	127,709	132,085	123,493
Motor Bodies Assembled .. .. .	"	62,408	94,676	77,548
Motor Spirit (including Benzol) .. .. .	'000 gals.	412,955	617,356	833,927
Motors, Electric .. .. .	No.	1,183,066	1,116,840	954,318
Nails .. .. .	Ton	24,214	25,058	26,340
Neckties .. .. .	Doz.	491,455	516,835	532,868
Newsprint .. .. .	Ton	73,608	79,015	79,600
Oatmeal (including Rolled Oats) .. .. .	Cwt.	322,985	365,980	402,782
Paint—Oil .. .. .	'000 gals.	6,098	6,553	6,618
Water .. .. .	'000 lb.	28,955	24,388	24,423
Peanut Butter and Paste .. .. .	"	4,627	4,736	4,346
Perambulators .. .. .	No.	155,433	160,374	149,596
Pickles .. .. .	'000 pints	6,765	7,721	8,119
Pigments—Colours ground in oil .. .. .	Cwt.	17,592	20,025	13,940
Zinc Oxide .. .. .	"	184,853	165,300	162,953
White Lead .. .. .	"	389,185	369,613	393,315
Other, including Dry Colours .. .. .	"	389,185	369,613	393,315
Plywood, $\frac{1}{2}$ inch basis .. .. .	'000 sq. ft.	186,604	200,699	193,838
Pollard .. .. .	Ton (2,000 lb.)	315,028	332,564	351,549
Preserves—				
Fruit Preserved (b) .. .. .	'000 'b.	319,235	304,299	289,510
Vegetables Preserved .. .. .	"	51,116	77,822	98,418
Pyjamas—				
Men's and Boys' (Suits only) .. .. .	Doz.	339,556	279,734	283,055
Women's and Girls' (inc. Nightdresses) .. .. .	"	343,464	359,780	399,995
Racquet Frames (all types) .. .. .	"	18,361	16,651	16,147
Refrigerators—Commercial .. .. .	No.	1,656	1,756	1,025
Domestic .. .. .	"	280,577	247,360	195,517
Rice (Cleaned) .. .. .	Cwt.	916,702	1,166,027	897,030
Ropes and Cables (excluding Wire) .. .. .	"	125,727	128,873	131,746
Rugs .. .. .	'000	141	142	163
Sauce .. .. .	'000 pints	28,482	28,668	33,494
Sausage Casings .. .. .	Cwt.	72,377	79,769	95,218
Semolina .. .. .	"	103,553	129,536	140,536
Shirts (Men's and Boys') .. .. .	Doz.	1,410,573	1,309,501	1,425,312
Sink Heaters .. .. .	No.	23,799	24,842	23,635
Soap and Detergents—				
Soap—Personal Toilet .. .. .	Cwt.	342,741	327,949	320,846
Household .. .. .	"	747,487	744,109	716,565
Industrial (Incl. Wool Scouring) (c) .. .. .	"	172,998	197,590	194,476
Extracts and Powders—Household .. .. .	"	926,156	822,988	791,267
Industrial .. .. .	"	81,338	87,455	75,694
Detergents—Personal Toilet .. .. .	"	7,932	6,000	8,763
Household .. .. .	"	99,225	91,901	114,510
Industrial .. .. .	"	19,777	22,499	34,460
Extracts and Powders—				
Household .. .. .	"	44,369	34,698	78,089
Industrial .. .. .	"	44,369	39,131	45,558
Socks and Stockings—				
Men's and Youths' .. .. .	'000 Doz. pairs	1,497	1,396	1,454
Women's and Maids' .. .. .	"	2,422	2,304	2,570
Infants' and Babywear (including Anklets) .. .. .	"	1,294	1,227	1,191
Soup—Tinned .. .. .	'000 pints	27,616	35,316	44,538
Dry-Mix .. .. .	'000 lb.	2,893	3,771	4,525
Spades and Shovels .. .. .	Doz.	32,058	33,873	33,255
Starch—Edible .. .. .	Cwt.	357,557	391,766	468,308
Inedible .. .. .	"	92,004	96,929	124,895
Steel, Structural, Fabricated .. .. .	Ton	162,793	218,124	245,101
Stoves, Ovens and Ranges—				
Domestic Cooking—				
Electric (d) .. .. .	No.	85,589	92,258	99,086
Gas .. .. .	"	58,758	57,097	54,966
Solid Fuel .. .. .	"	49,758	47,300	46,005
Sugar—Raw (94 net titre) .. .. .	Ton	1,327,546	1,171,713	1,207,797
Refined .. .. .	"	481,639	482,660	480,393
Sulphate of Ammonia .. .. .	"	78,434	75,321	110,898
Superphosphate .. .. .	"	1,960,605	2,125,803	1,975,015

(a) Includes malted milk and infants' and invalids' foods. (b) Includes canned apple, all types. (c) Includes industrial flakes and chips. (d) Includes stoves, cookers, etc.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES :  
AUSTRALIA—continued.

Article.	Unit of Quantity.	1954-55.	1955-56.	1956-57.
Talcum Powder .. .. .	Cwt.	30,454	35,824	35,084
Tallow—				
Edible .. .. .	"	507,477	681,057	612,722
Inedible .. .. .	"	1,126,770	1,346,145	1,630,892
Television Sets .. .. .	No.	..	(a) 2,636	121,232
Tiles, Roofing—				
Cement .. .. .	'000	53,720	53,782	44,595
Terracotta .. .. .	"	63,934	64,746	57,673
Timber—				
From Native Logs—				
Hardwood .. .. .	'000 super. ft.	1,184,992	1,180,936	1,151,429
Softwood .. .. .	"	264,296	268,785	267,431
From Imported Logs—				
Hardwood .. .. .	"	28,748	27,894	26,853
Softwood .. .. .	"	156,037	173,549	174,531
Toasters, Electric (Domestic) .. .. .	No.	21,466	18,836	18,917
Tobacco .. .. .	'000 lb.	1,237,714	1,208,758	1,508,439
Tomato Juice .. .. .	Gal.	666,403	767,751	740,344
Towels .. .. .	Doz.	3,099	3,462	4,048
Transformers and Converters—				
Above 20 k.v.a. .. .. .	No.	375,717	628,147	821,581
Below 20 k.v.a. .. .. .	"	116,059	133,694	131,424
Twine (all types) .. .. .	Cwt.	2,737,172	2,907,492	2,711,087
Tyres, Pneumatic—				
Motor Car and Motor Cycle .. .. .	No.	587,739	544,807	536,384
Truck and Omnibus .. .. .	"	190,365	184,273	190,577
All Other (excl. Bicycle) .. .. .	"	478,144	570,156	622,554
Umbrellas .. .. .	'000 doz.	4,328	4,460	4,687
Underwear .. .. .				
Vacuum Cleaners (Domestic) .. .. .	No.	59,968	55,674	83,910
Varnishes .. .. .	'000 gals.	3,188	4,167	3,533
Washing Machines, Household, Electric .. .. .	No.	166,312	165,558	144,422
Weatherboards—				
Australian Timber .. .. .	'000 super. ft.	23,529	23,910	22,937
Imported Timber .. .. .	"	3,264	2,150	1,759
Wheatmeal(b) .. .. .	Ton (2,000 lb.)	128,863	110,635	123,854
Wheelbarrows (Metal) .. .. .	No.	84,631	73,031	66,999
Wireless—				
Cabinets—				
Wood .. .. .	"	86,210	(c) 101,454	} (c) 429,647
Other .. .. .	"	310,684	281,685	
Receiving Sets (including Radiograms) .. .. .	"	456,034	458,012	366,282
Wool Scoured—				
For Sale .. .. .	'000 lb.	40,994	38,808	43,632
For use in own works .. .. .	"	37,610	40,875	47,625
On Commission .. .. .	"	57,643	65,025	74,506
Wool Tops .. .. .	"	30,886	35,640	42,661
Yarn(d)				
Cotton .. .. .	"	41,493	40,543	41,981
Woollen .. .. .	"	19,790	20,033	22,884
Worsted .. .. .	"	22,897	23,180	24,818
Zinc Oxide (See Pigments)				

(a) Production commenced late in 1955-56. Number produced in 1957-58 was 285,315.  
(b) Excludes wheatmeal for baking included with flour. (c) Includes television cabinets.  
(d) Including mixtures predominantly of the fibre mentioned.

## § 11. Individual Industries.

1. General.—Particulars on pages 154-181, §§ 2-9 afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible, within the limits of this work, to give a detailed account of each industry, particular industries dealt with hereunder are of special importance because of the employment which they provide for labour and capital or for other features of special interest. Where there are only one or two establishments in a particular industry in the State or the Commonwealth, details of activities are not published, but are combined with some other factory group so that operations of individual concerns will not be disclosed.

The statistics in the following tables should be read in the light of the following definitions.

**Factory.** A factory is taken to be a manufacturing establishment in which four or more persons are employed or in which power, other than manual, is used.

*Average Number of Persons Employed.* All persons employed in the manufacturing activities of a factory are counted as factory employees, including working proprietors and "out-workers". The average number of persons employed means, in general, the average number over the whole year and not the average over the period worked.

*Value of Materials Used.* This item includes the value, in the usual sense, of the materials used, stores used, containers, tools replaced, and materials used in repairs to plant.

*Value of Fuel, etc., Used.* This item includes also the cost of power and light used, of lubricants and of water.

*Value of Output.* The amounts given under this heading represent the selling value, at the factory, of goods made or processed during the year, including by-products, also the value of other work done.

*Value of Production.* The value of production is obtained by deducting "Value of materials used" and "Value of fuel used", as defined above, from the "Value of output".

*Rated Horse-power of Engines Used.* Statistics of power used in factories other than Central Electric Stations relate to the "rated horse-power" of engines ordinarily in use.

For more detailed definitions see § 1, par. 6 of this chapter, page 151.

Details of some of the principal articles produced in factories in Australia during the years 1954-55 to 1956-57 are shown in the table on the preceding pages (§ 10).

2. **Portland Cement and Cement Goods.**—The manufacture of portland cement and cement goods is an important industry included in Class I. Particulars for the three industries under this general heading are shown for 1956-57 and for a series of years in the following table.

#### PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT GOODS.

AUSTRALIA, 1956-57.

Items.	Portland Cement.	Asbestos Cement Sheets and Mouldings.	Other Cement Goods.	Total.
Number of factories .. ..	15	14	450	479
Number of persons employed .. ..	3,043	2,448	5,197	10,688
Salaries and wages paid .. .. £'000	3,047	2,542	4,723	10,312
Value of power, fuel, etc., used .. .. £'000	4,634	271	214	5,119
Value of materials used .. .. £'000	6,503	5,003	11,720	23,226
Value of production .. .. £'000	7,942	4,266	9,020	21,228
Total value of output .. .. £'000	19,079	9,540	20,954	49,573
Value of land and buildings .. .. £'000	3,369	1,090	2,535	6,994
Value of plant and machinery .. .. £'000	13,552	1,713	3,189	18,454
Horse-power of engines ordinarily in use .. h.p.	79,178	10,579	16,048	105,805

AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	132	504	479	480	489	479
Number of persons employed .. ..	3,932	9,352	9,304	10,444	11,167	10,688
Salaries and wages paid .. .. £'000	897	6,942	7,435	8,704	10,044	10,312
Value of power, fuel, etc., used .. .. £'000	562	3,436	3,950	4,445	4,792	5,119
Value of materials used .. .. £'000	1,542	14,303	16,013	19,418	21,999	23,226
Value of production .. .. £'000	2,385	12,197	14,198	17,009	19,460	21,228
Total value of output .. .. £'000	4,489	29,936	34,161	40,872	46,251	49,573
Value of land and buildings .. .. £'000	1,350	3,890	4,206	4,726	6,128	6,994
Value of plant and machinery .. .. £'000	2,516	10,018	10,796	13,208	15,542	18,454
Horse-power of engines ordinarily in use .. .. h.p.	39,617	91,880	89,260	95,870	108,715	105,805

3. **Chemicals, Drugs and Medicines.**—In 1945-46, the classification of factories was amended to provide for the separate tabulation of factories engaged in the production of Industrial and Heavy Chemicals and Acids and those engaged in producing Pharmaceutical and Toilet Preparations, which previously had been combined. Details for each of these industries are given in the next two tables for 1956-57 with comparable figures for previous years. However, it should be noted that, in order to avoid the publication of confidential information, particulars relating to Industrial and Heavy Chemicals include details for the Explosives industry.

INDUSTRIAL AND HEAVY CHEMICALS AND ACIDS (INCLUDING EXPLOSIVES).  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	144	80	19	15	11	1	270
Number of persons employed .. ..	6,372	6,603	319	891	(a)	(a)	14,509
Salaries and wages paid .. .. £'000	6,859	6,392	282	881	(a)	(a)	14,684
Value of power, fuel, etc., used .. .. £'000	2,131	980	71	558	(a)	(a)	3,845
Value of materials used .. .. £'000	21,649	14,410	532	1,206	(a)	(a)	38,335
Value of production .. .. £'000	18,296	12,552	612	2,543	(a)	(a)	34,513
Total value of output .. .. £'000	42,076	27,942	1,215	4,307	(a)	(a)	76,693
Value of land and buildings .. .. £'000	9,235	7,240	224	788	(a)	(a)	17,831
Value of plant and machinery .. .. £'000	16,025	10,836	210	1,579	(a)	(a)	29,190
Horse-power of engines ordinarily in use .. .. h.p.	49,966	47,573	1,828	5,242	(a)	(a)	107,787

## AUSTRALIA.

Items.	1945-46.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	165	229	234	248	258	270
Number of persons employed .. ..	10,228	11,253	11,765	13,032	14,107	14,509
Salaries and wages paid .. .. £'000	3,450	8,928	9,907	11,833	13,574	14,684
Value of power, fuel, etc., used .. .. £'000	618	2,210	2,757	3,043	3,462	3,845
Value of materials used .. .. £'000	6,007	19,538	25,158	29,004	33,506	38,335
Value of production .. .. £'000	6,627	16,879	20,643	25,095	29,895	34,513
Total value of output .. .. £'000	13,252	38,627	48,558	57,142	66,863	76,693
Value of land and buildings .. .. £'000	11,697	11,923	13,389	14,190	15,987	17,831
Value of plant and machinery .. .. £'000	10,964	19,612	23,573	25,607	27,125	29,190
Horse-power of engines ordinarily in use .. .. h.p.	69,399	85,254	90,807	95,188	101,527	107,787

(a) Not available for publication; included in the total for Australia.

## PHARMACEUTICAL AND TOILET PREPARATIONS.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	125	59	5	13	3	1	206
Number of persons employed .. ..	3,237	2,537	118	473	(a)	(a)	6,446
Salaries and wages paid .. .. £'000	2,388	2,202	70	309	(a)	(a)	5,020
Value of power, fuel, etc., used .. .. £'000	86	192	1	31	(a)	(a)	312
Value of materials used .. .. £'000	7,726	6,006	297	1,163	(a)	(a)	15,292
Value of production .. .. £'000	10,835	5,468	175	696	(a)	(a)	17,312
Total value of output .. .. £'000	18,647	11,666	473	1,890	(a)	(a)	32,916
Value of land and buildings .. .. £'000	3,425	3,880	61	310	(a)	(a)	7,828
Value of plant and machinery .. .. £'000	1,123	1,432	17	142	(a)	(a)	2,746
Horse-power of engines ordinarily in use .. .. h.p.	4,018	10,965	74	1,469	(a)	(a)	16,666

## AUSTRALIA.

Items.	1945-46.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	215	206	208	210	206	206
Number of persons employed .. ..	5,514	5,363	6,012	6,233	6,400	6,446
Salaries and wages paid .. .. £'000	1,699	3,468	3,898	4,255	4,635	5,020
Value of power, fuel, etc., used .. .. £'000	57	197	238	223	259	312
Value of materials used .. .. £'000	5,402	9,784	12,017	12,729	13,565	15,292
Value of production .. .. £'000	4,790	10,188	12,969	14,380	15,279	17,312
Total value of output .. .. £'000	10,249	20,169	25,224	27,332	29,103	32,916
Value of land and buildings .. .. £'000	1,534	3,931	4,755	6,022	6,830	7,828
Value of plant and machinery .. .. £'000	598	1,569	1,793	2,129	2,686	2,746
Horse-power of engines ordinarily in use .. .. h.p.	6,324	12,238	12,777	13,592	14,301	16,666

(a) Not available for publication; included in the total for Australia.

4. White Lead, Paints and Varnish.—The following table shows particulars of this industry for each State during 1956-57 and for Australia for a series of years.

**WHITE LEAD, PAINTS AND VARNISH.**  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	85	57	17	14	10	3	186
Number of persons employed ..	3,101	1,724	334	530	(a)	(a)	5,815
Salaries and wages paid .. £'000	3,011	1,657	264	473	(a)	(a)	5,508
Value of power, fuel, etc., used £'000	269	80	20	25	(a)	(a)	400
Value of materials used .. £'000	12,370	6,708	1,671	2,535	(a)	(a)	23,916
Value of production .. £'000	6,580	3,814	1,086	1,668	(a)	(a)	13,567
Total value of output .. £'000	19,219	10,602	2,777	4,228	(a)	(a)	37,883
Value of land and buildings .. £'000	2,640	2,808	298	662	(a)	(a)	6,680
Value of plant and machinery .. £'000	1,311	1,527	166	339	(a)	(a)	3,408
Horse-power of engines ordinarily in use .. .. h.p.	13,947	8,735	1,452	2,080	(a)	(a)	26,969

AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	102	175	174	175	178	186
Number of persons employed ..	2,271	4,622	4,934	5,322	5,804	5,815
Salaries and wages paid .. £'000	535	3,346	3,757	4,636	5,300	5,508
Value of power, fuel, etc., used .. £'000	45	258	337	376	384	400
Value of materials used .. £'000	2,275	14,657	18,603	21,553	23,504	23,916
Value of production .. £'000	1,585	3,583	9,891	11,980	12,874	13,567
Total value of output .. £'000	3,905	23,498	28,831	33,909	36,762	37,883
Value of land and buildings .. £'000	761	3,669	4,066	5,089	5,563	6,680
Value of plant and machinery .. £'000	324	2,113	2,230	2,892	3,261	3,408
Horse-power of engines ordinarily in use .. .. h.p.	7,696	22,769	22,719	24,178	25,050	26,969

(a) Not available for publication ; figures are included in the total for Australia.

5. Soap and Candle Factories.—The following table shows particulars of factories in the Soap and Candle industry in each State for 1956-57 and for Australia for a series of years :—

**SOAP AND CANDLES.**  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	44	25	9	5	3	1	87
Number of persons employed ..	1,790	671	264	124	(a)	(a)	2,932
Salaries and wages paid .. £'000	1,554	785	200	105	(a)	(a)	2,704
Value of power, fuel, etc., used .. £'000	170	181	22	14	(a)	(a)	393
Value of materials used .. £'000	6,738	4,398	723	289	(a)	(a)	12,437
Value of production .. £'000	5,880	2,516	498	160	(a)	(a)	9,150
Total value of output .. £'000	12,788	7,095	1,243	463	(a)	(a)	21,980
Value of land and buildings .. £'000	688	812	150	76	(a)	(a)	1,784
Value of plant and machinery .. £'000	1,182	1,658	182	58	(a)	(a)	3,150
Horse-power of engines ordinarily in use .. .. h.p.	5,743	3,450	853	575	(a)	(a)	10,922

(a) Not available for publication ; figures are included in the total for Australia.

AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	65	89	89	91	92	87
Number of persons employed ..	2,620	3,028	3,058	2,962	3,167	2,932
Salaries and wages paid .. £'000	501	2,460	2,544	2,589	2,858	2,704
Value of power, fuel, etc., used .. £'000	76	475	427	420	406	393
Value of materials used .. £'000	1,568	8,846	10,214	11,941	12,057	12,437
Value of production .. £'000	1,886	6,324	6,732	7,425	8,147	9,150
Total value of output .. £'000	3,530	15,645	17,373	19,786	20,610	21,980
Value of land and buildings .. £'000	666	1,487	1,565	1,619	1,743	1,784
Value of plant and machinery .. £'000	577	1,985	2,244	2,653	3,001	3,150
Horse-power of engines ordinarily in use .. .. h.p.	5,267	8,606	8,795	8,676	10,711	10,922
Materials used—						
Tallow .. .. cwt.	535,511	1,024,772	1,120,828	1,151,146	1,162,578	1,152,865
Alkali for Soap (a) .. .. cwt.	194,869	386,176	377,451	421,401	390,756	366,796
Coconut oil—refined and unrefined .. cwt.	138,954	95,825	86,576	93,498	83,346	80,262
Articles produced—						
Soap (excl. Sand Soap) .. .. cwt.	908,797	1,179,871	1,225,183	1,263,226	1,260,648	1,231,890
Cleansers and Scourers (incl. Sand Soap) .. .. cwt.	123,702	123,429	121,232	115,350	105,046	78,168
Soap Extracts and Powders .. .. cwt.	191,232	885,158	890,241	1,007,494	910,443	866,958
Candles made .. .. cwt.	28,649	14,256	8,611	10,369	10,011	10,354

(a) Includes Soda Ash.

NOTE.—Preliminary figures of production in 1957-58 were Soap, 1,304,000 cwt.; Cleansers and Scourers, 72,000 cwt.; and Soap Extracts and Powders, 876,000 cwt.

6. Chemical Fertilizers.—The following table shows particulars of the factories engaged in the manufacture of chemical fertilizers in each State during 1956-57 and for Australia for a series of years. Details of the consumption, imports and exports of fertilizers will be found in Chapter XXII.—Agricultural Production.

## CHEMICAL FERTILIZERS.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	15	8	8	8	6	7	52
Number of persons employed ..	932	1,563	(a)	952	942	(a)	5,074
Salaries and wages paid .. £'000	996	1,597	(a)	933	839	(a)	5,069
Value of power, fuel, etc., used £'000	475	243	(a)	100	149	(a)	1,160
Value of materials used .. £'000	3,868	6,966	(a)	5,724	5,428	(a)	25,479
Value of production .. £'000	1,940	3,235	(a)	1,815	2,024	(a)	10,158
Total value of output .. £'000	6,283	10,444	(a)	7,639	7,601	(a)	36,797
Value of land and buildings £'000	2,932	871	(a)	654	1,885	(a)	7,341
Value of plant and machinery £'000	2,753	1,300	(a)	3,346	1,977	(a)	11,404
Horse-power of engines ordinarily in use .. .. h.p.	17,163	14,649	(a)	9,154	8,180	(a)	59,457

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	36	51	51	53	54	52
Number of persons employed ..	2,540	4,483	4,531	4,735	4,911	5,074
Salaries and wages paid .. £'000	601	3,759	3,988	4,372	4,809	5,069
Value of power, fuel, etc., used £'000	114	786	842	852	939	1,160
Value of materials used .. £'000	3,231	21,100	20,521	21,519	24,098	25,479
Value of production .. £'000	1,600	7,255	8,109	8,794	10,267	10,158
Total value of output .. £'000	4,945	29,141	29,472	31,165	35,304	36,797
Value of land and buildings £'000	1,449	4,794	6,067	6,512	7,033	7,341
Value of plant and machinery £'000	2,353	6,218	8,067	9,270	11,645	11,404
Horse-power of engines ordinarily in use .. .. h.p.	18,165	39,850	41,644	47,595	58,044	59,457

(a) Not available for publication; figures are included in the total for Australia.

7. Iron and Steel Works and Engineering.—(i) *General.* In 1945-46, the classification of factories was amended to provide for the tabulation in four separate groups of those industries previously included under Iron and Steel, and Engineering. The first group (Smelting, Converting, Refining and Rolling of Iron and Steel) covers blast furnaces, steel works and rolling mills. The second group, Foundries (Ferrous), covers those engaged in the founding of iron and steel. The third group (Plant, Equipment and Machinery including Machine Tools) covers those industries engaged in the production of boilers, engines, machines and machinery, machine tools, structural steel fabrications, steel furniture, etc. The fourth group (Other Engineering) includes jobbing and general engineers, not elsewhere included. Detailed statistics for the four groups mentioned are shown in the following tables.

(ii) *Smelting, Converting, Refining and Rolling of Iron and Steel.* In the following table, particulars are shown for each State for 1956-57 and for Australia in selected years for the group Smelting, Converting, Refining and Rolling of Iron and Steel.

## SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Number of factories .. ..	17	11	..	4	2	..	34
Number of persons employed ..	24,168	1,396	..	(a)	(a)	..	26,078
Salaries and wages paid .. £'000	26,779	1,396	..	(a)	(a)	..	28,636
Value of power, fuel, etc., used £'000	17,890	347	..	(a)	(a)	..	20,538
Value of materials used .. £'000	134,029	1,342	..	(a)	(a)	..	136,483
Value of production .. £'000	62,657	1,869	..	(a)	(a)	..	66,385
Total value of output .. £'000	214,576	3,558	..	(a)	(a)	..	223,406
Value of land and buildings £'000	8,449	285	..	(a)	(a)	..	9,054
Value of plant and machinery £'000	58,177	368	..	(a)	(a)	..	61,608
Horse-power of engines ordinarily in use .. .. h.p.	424,669	7,866	..	(a)	(a)	..	448,541

## AUSTRALIA.

Items.	1945-46.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	..	27	32	33	(b) 28	34
Number of persons employed ..	..	10,413	16,188	16,688	17,842	26,978
Salaries and wages paid .. £'000	..	4,164	14,455	15,609	18,238	28,636
Value of power, fuel, etc., used .. £'000	..	2,777	14,085	15,430	15,670	17,864
Value of materials used .. £'000	..	19,134	76,983	88,802	94,928	101,416
Value of production .. £'000	..	7,393	27,336	27,995	34,381	44,269
Total value of output .. £'000	..	29,304	118,404	132,227	144,979	163,549
Value of land and buildings .. £'000	..	2,197	5,278	6,508	6,615	6,457
Value of plant and machinery .. £'000	..	5,669	20,753	24,279	26,394	29,154
Horse-power of engines ordinarily in use .. h.p.	..	198,317	248,440	287,618	339,135	363,751

(a) Not available for publication; figures are included in the total for Australia. (b) The reduction in the number of establishments is due to combined returns being furnished where formerly separate returns were submitted for Blast Furnaces, Steel Furnaces and Rolling Mills operated by the one establishment.

Particulars of the production of pig-iron and steel will be found on page 183 and in Chapter XXVII.—Mineral Industry.

(iii) *Foundries (Ferrous)*. Particulars covering those industries classified as founding of iron and steel are shown for each State for 1956-57 and for Australia in selected years in the following table:—

**FOUNDRIES—FERROUS.**  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	85	217	23	24	19	..	368
Number of persons employed .. ..	2,712	3,055	818	529	519	..	7,633
Salaries and wages paid .. .. £'000	2,600	2,877	664	478	441	..	7,060
Value of power, fuel, etc., used .. .. £'000	331	380	53	91	120	..	975
Value of materials used .. .. £'000	1,870	2,885	685	418	363	..	6,221
Value of production .. .. £'000	3,644	4,214	1,044	711	622	..	10,235
Total value of output .. .. £'000	5,845	7,479	1,782	1,220	1,105	..	17,431
Value of land and buildings .. .. £'000	1,292	1,850	471	147	139	..	3,899
Value of plant and machinery .. .. £'000	987	1,764	465	161	168	..	3,545
Horse-power of engines ordinarily in use .. .. h.p.	10,971	12,910	3,493	2,590	2,871	..	32,835

AUSTRALIA.

Items.	1945-46.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	312	373	357	368	373	368
Number of persons employed .. ..	5,344	6,584	6,611	7,099	7,434	7,633
Salaries and wages paid .. .. £'000	1,612	4,989	5,129	6,116	6,706	7,060
Value of power, fuel, etc., used .. .. £'000	161	642	702	796	918	975
Value of materials used .. .. £'000	1,210	4,026	4,057	4,881	5,396	6,221
Value of production .. .. £'000	2,341	7,337	7,469	8,983	9,652	10,235
Total value of output .. .. £'000	3,712	12,005	12,228	14,660	15,966	17,431
Value of land and buildings .. .. £'000	988	2,144	2,299	2,623	3,564	3,899
Value of plant and machinery .. .. £'000	619	1,923	2,123	2,342	3,234	3,545
Horse-power of engines ordinarily in use h.p.	13,381	24,467	25,415	26,451	30,738	32,835

(iv) *Plant, Equipment and Machinery (including Machine Tools)*. The next table shows particulars for this group for each State during 1956-57 and for Australia in selected years.

**PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS).**  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	1,089	696	147	176	100	4	2,212
Number of persons employed .. ..	26,983	24,380	6,542	8,235	(a)	(a)	69,476
Salaries and wages paid .. .. £'000	26,680	23,016	5,274	7,512	(a)	(a)	65,272
Value of power, fuel, etc., used .. .. £'000	1,045	954	222	416	(a)	(a)	2,775
Value of materials used .. .. £'000	40,972	35,400	6,589	12,358	(a)	(a)	99,172
Value of production .. .. £'000	44,543	38,193	7,857	12,142	(a)	(a)	106,922
Total value of output .. .. £'000	86,560	74,547	14,668	24,916	(a)	(a)	208,869
Value of land and buildings .. .. £'000	16,559	14,987	2,056	3,783	(a)	(a)	39,692
Value of plant and machinery .. .. £'000	11,771	10,810	1,793	3,097	(a)	(a)	29,112
Horse-power of engines ordinarily in use .. .. h.p.	88,715	76,412	18,320	28,175	(a)	(a)	222,937

AUSTRALIA.

Items.	1945-46.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	1,038	1,787	1,911	1,980	2,062	2,212
Number of persons employed .. ..	46,123	60,140	60,840	64,588	68,699	69,476
Salaries and wages paid .. .. £'000	14,259	45,414	47,620	54,561	61,872	65,272
Value of power, fuel, etc., used .. .. £'000	605	2,095	2,219	2,378	2,570	2,775
Value of materials used .. .. £'000	16,455	63,134	68,288	80,462	93,510	99,172
Value of production .. .. £'000	21,044	70,790	75,997	87,040	98,574	106,922
Total value of output .. .. £'000	38,104	136,019	146,504	169,880	194,654	208,869
Value of land and buildings .. .. £'000	7,227	22,332	25,259	28,687	34,019	39,692
Value of plant and machinery .. .. £'000	7,046	19,784	21,335	23,548	26,261	29,112
Horse-power of engines ordinarily in use h.p.	101,810	197,031	198,300	201,626	217,880	222,937

(a) Not available for publication; figures are included in the total for Australia.

(v) *Other Engineering*. Details covering jobbing and general engineering works not elsewhere included are shown for each State for 1956-57 and for Australia in selected years in the following table.

OTHER ENGINEERING.  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	789	784	156	188	156	93	2,166
Number of persons employed ..	6,646	8,395	1,601	3,821	965	1,720	23,148
Salaries and wages paid .. £'000	5,757	7,444	1,226	3,446	685	1,479	20,037
Value of power, fuel, etc., used .. £'000	210	231	37	100	33	63	674
Value of materials used .. £'000	6,634	7,570	1,502	4,140	827	1,647	22,320
Value of production .. £'000	9,732	11,607	1,952	4,957	1,098	2,222	31,568
Total value of output .. £'000	16,576	19,408	3,491	9,197	1,958	3,932	54,562
Value of land and buildings .. £'000	4,267	5,059	699	2,279	560	937	13,801
Value of plant and machinery .. £'000	2,712	3,726	555	1,428	302	717	9,440
Horse-power of engines ordinarily in use .. h.p.	19,444	25,679	4,292	13,342	3,469	6,028	72,254

## AUSTRALIA.

Items.	1945-46.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	963	1,975	2,041	2,128	2,220	2,166
Number of persons employed ..	13,112	20,005	20,981	22,540	24,445	23,148
Salaries and wages paid .. £'000	3,634	13,804	15,100	17,491	20,477	20,037
Value of power, fuel, etc., used .. £'000	162	460	530	599	698	674
Value of materials used .. £'000	3,599	14,041	16,427	20,834	24,534	22,320
Value of production .. £'000	5,432	21,551	23,755	28,025	32,949	31,568
Total value of output .. £'000	9,193	36,052	40,712	49,458	58,181	54,562
Value of land and buildings .. £'000	2,369	8,285	9,900	11,289	13,205	13,801
Value of plant and machinery .. £'000	2,091	6,366	7,044	8,070	9,363	9,440
Horse-power of engines ordinarily in use .. h.p.	26,095	59,024	62,774	66,406	78,246	72,254

8. *Extracting and Refining of Non-ferrous Metals: Alloys.*—The following table shows particulars of establishments engaged in metal extraction and ore reduction including secondary recovery of metals, but excluding blast furnaces engaged in production of pig iron from iron ore, for each State during 1956-57 and for Australia for a series of years. It should be noted that as Ore Beneficiation and Concentration, formerly included as part of this section of Manufacturing Industry, was transferred to the Mining Industry in 1952-53 details for that and later years are not comparable with those for earlier years.

EXTRACTING AND REFINING OF NON-FERROUS METALS: ALLOYS.  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	25	22	5	2	1	3	58
Number of persons employed ..	1,354	299	646	(b)	(b)	(b)	7,212
Salaries and wages paid .. £'000	1,599	317	863	(b)	(b)	(b)	8,720
Value of power, fuel, etc., used .. £'000	554	49	799	(b)	(b)	(b)	4,282
Value of materials used .. £'000	13,108	3,037	16,042	(b)	(b)	(b)	68,426
Value of production .. £'000	4,083	753	2,303	(b)	(b)	(b)	19,773
Total value of output .. £'000	17,745	3,839	19,144	(b)	(b)	(b)	92,481
Value of land and buildings .. £'000	872	325	992	(b)	(b)	(b)	6,566
Value of plant and machinery .. £'000	1,441	185	1,356	(b)	(b)	(b)	14,485
Horse-power of engines ordinarily in use .. h.p.	9,987	814	10,473	(b)	(b)	(b)	76,212

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	42	59	59	62	56	58
Number of persons employed ..	5,532	6,958	6,592	6,782	7,029	7,212
Salaries and wages paid .. £'000	1,613	6,085	6,069	6,432	7,434	8,720
Value of power, fuel, etc., used .. £'000	598	2,803	3,063	3,253	3,753	4,282
Value of materials used .. £'000	16,844	44,481	53,711	62,859	70,000	68,426
Value of production .. £'000	3,892	14,163	12,648	14,148	17,787	19,773
Total value of output .. £'000	21,334	61,447	69,422	80,260	91,540	92,481
Value of land and buildings .. £'000	1,177	2,669	2,743	3,044	6,155	6,566
Value of plant and machinery .. £'000	3,526	4,371	5,390	6,019	13,367	14,485
Horse-power of engines ordinarily in use .. h.p.	54,450	70,424	65,067	66,280	79,696	76,212

(a) In Western Australia the majority of the plants are worked at the mines and are therefore not included. (b) Not available for publication; figures are included in the total for Australia. (c) See text above table.

9. *Electrical Machinery, Cables and Apparatus.*—The following table shows particulars of this industry for each State during 1956-57 and for Australia for a series of years.

ELECTRICAL MACHINERY, CABLES AND APPARATUS.  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	542	380	72	71	71	17	1,153
Number of persons employed ..	29,562	10,697	1,721	1,609	(a)	(a)	44,594
Salaries and wages paid .. £'000	26,367	9,071	1,338	1,252	(a)	(a)	38,780
Value of power, fuel, etc., used .. £'000	1,425	439	34	36	(a)	(a)	1,964
Value of materials used .. £'000	53,911	16,518	3,254	1,512	(a)	(a)	76,256
Value of production .. £'000	44,415	13,605	2,147	1,709	(a)	(a)	63,198
Total value of output .. £'000	99,751	30,562	5,435	3,257	(a)	(a)	141,418
Value of land and buildings .. £'000	15,528	7,871	677	647	(a)	(a)	25,306
Value of plant and machinery .. £'000	10,790	4,636	457	304	(a)	(a)	16,409
Horse-power of engines ordinarily in use .. h.p.	60,918	22,657	4,685	2,044	(a)	(a)	91,991

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories ..	360	965	1,028	1,064	1,099	1,153
Number of persons employed ..	10,666	31,949	38,377	42,007	43,841	44,594
Salaries and wages paid .. £'000	2,031	22,903	28,969	33,403	36,663	38,780
Value of power, fuel, etc., used .. £'000	105	991	1,391	1,651	1,808	1,964
Value of materials used .. £'000	3,195	36,668	58,237	69,962	75,129	76,256
Value of production .. £'000	3,655	38,633	49,032	54,637	57,036	63,198
Total value of output .. £'000	6,955	76,292	108,660	126,250	133,973	141,418
Value of land and buildings .. £'000	1,627	11,270	13,829	16,885	19,992	25,306
Value of plant and machinery .. £'000	897	8,168	9,709	11,915	13,854	16,409
Horse-power of engines ordinarily in use h.p.	12,043	66,512	74,088	81,058	83,279	91,991

(a) Not available for publication, figures are included in the total for Australia.

10. **Railway and Tramway Workshops (Government and Local Authority).**—The railway and tramway workshops, which form an important part of Class IV., are chiefly owned by State Governments and Local Authorities. *Workshops (fourteen in 1956-57) controlled by non-public bodies are not included in the figures below:—*

TRAMCARS AND RAILWAY ROLLING STOCK.(a)  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	41	22	13	15	27	7	125
Number of persons employed ..	15,548	7,580	6,671	4,292	(b)	(b)	38,780
Salaries and wages paid .. £'000	14,197	6,554	5,418	3,772	(b)	(b)	33,670
Value of power, fuel, etc., used .. £'000	439	204	137	140	(b)	(b)	1,099
Value of materials used .. £'000	7,734	5,417	3,276	2,790	(b)	(b)	21,565
Value of production .. £'000	16,704	8,878	6,326	4,699	(b)	(b)	41,172
Total value of output .. £'000	24,879	14,499	9,739	7,629	(b)	(b)	63,827
Value of land and buildings .. £'000	6,061	1,918	799	1,492	(b)	(b)	11,494
Value of plant and machinery .. £'000	9,273	1,075	1,087	1,877	(b)	(b)	14,673
Horse-power of engines ordinarily in use .. h.p.	43,872	23,005	17,491	24,096	(b)	(b)	122,852

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories ..	117	123	124	123	125	125
Number of persons employed ..	27,310	39,073	39,262	38,599	38,357	38,780
Salaries and wages paid .. £'000	6,721	28,002	28,425	30,777	33,159	33,670
Value of power, fuel, etc., used .. £'000	226	907	994	1,025	1,061	1,099
Value of materials used .. £'000	4,976	16,706	17,093	18,818	20,555	21,565
Value of production .. £'000	8,021	33,875	34,354	37,505	40,404	41,172
Total value of output .. £'000	13,223	51,488	52,441	57,348	62,020	63,827
Value of land and buildings .. £'000	6,737	9,279	9,730	10,524	11,076	11,494
Value of plant and machinery .. £'000	5,390	10,701	12,166	13,124	14,072	14,673
Horse-power of engines ordinarily in use h.p.	53,671	98,251	108,478	112,184	116,775	122,852

(a) Government and Local Authority only.

(b) Not available for publication, figures included in the total for Australia.

A railway workshop in the Northern Territory is chiefly engaged in making repairs to rolling stock, etc., no new goods being manufactured. Particulars of this establishment are not included in any of the tables in this chapter.

11. **Motor Vehicles.**—The industries catering for the motor trade are included in Class IV., Industrial Metals, Machines and Conveyances. In the table below a summary is given of the principal statistics for 1956-57 for each branch of industry associated with the motor trade of Australia.

**MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC., AUSTRALIA.**  
1956-57.

Items.	Construction and Assembly.	Repairs.	Motor Bodies. (a)	Motor Accessories.	Total.
Number of factories .. ..	70	8,556	1,457	251	10,334
Number of persons employed .. ..	16,908	55,478	25,460	9,634	107,480
Salaries and wages paid .. .. £'000	16,144	38,987	22,515	8,636	86,282
Value of power, fuel, etc., used .. .. £'000	1,029	1,217	896	605	3,747
Value of materials used .. .. £'000	25,495	41,640	42,586	10,576	120,297
Value of production .. .. £'000	25,131	59,736	32,958	14,193	132,018
Total value of output .. .. £'000	51,655	102,593	76,440	25,374	256,062
Value of land and buildings .. .. £'000	14,260	45,997	12,786	5,774	78,817
Value of plant and machinery .. .. £'000	12,908	11,713	10,247	6,022	40,890
Horse-power of engines ordinarily in use h.p.	53,957	60,113	56,696	36,026	206,792

(a) Includes motor body repairing, panel beating, duco spraying, etc.

In the next table, similar details are shown on a State basis for 1956-57 and for Australia for selected years for these industries combined.

**MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.**  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	4,221	2,656	1,303	933	930	291	10,334
Number of persons employed .. ..	35,602	36,406	10,633	16,494	6,233	2,112	107,480
Salaries and wages paid .. .. £'000	27,801	30,520	7,024	14,845	4,565	1,527	86,282
Value of power, fuel, etc., used £'000	1,186	1,513	216	607	185	40	3,747
Value of materials used .. .. £'000	38,585	39,308	7,721	26,160	6,839	1,684	120,297
Value of production .. .. £'000	44,870	45,270	12,677	19,631	7,209	2,361	132,018
Total value of output .. .. £'000	84,641	86,091	20,614	46,398	14,233	4,085	256,062
Value of land and buildings £'000	29,307	28,658	5,908	8,314	4,708	1,922	78,817
Value of plant and machinery £'000	12,511	16,539	1,939	7,849	1,655	397	40,890
Horse-power of engines ordinarily in use .. .. h.p.	60,845	76,342	12,442	41,846	13,100	2,217	206,792

AUSTRALIA.

Items.	1945-46.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	3,592	7,422	8,302	8,993	9,707	10,334
Number of persons employed .. ..	39,706	82,609	89,913	98,343	105,959	107,480
Salaries and wages paid .. .. £'000	10,582	54,666	62,454	73,073	84,082	86,282
Value of power, fuel, etc., used .. .. £'000	395	1,987	2,477	2,798	3,189	3,747
Value of materials used .. .. £'000	12,143	74,405	94,173	108,119	126,933	120,297
Value of production .. .. £'000	15,818	86,305	101,054	112,541	126,459	132,018
Total value of output .. .. £'000	28,356	162,697	197,704	223,458	256,581	256,062
Value of land and buildings .. .. £'000	9,878	38,718	45,835	55,451	66,235	78,817
Value of plant and machinery .. .. £'000	3,758	20,129	23,397	26,073	32,390	40,890
Horse-power of engines ordinarily in use h.p.	56,117	139,253	146,930	160,001	202,963	206,792

The table below shows the production and imports of motor bodies for 1938-39 and 1952-53 to 1957-58 :-

**PRODUCTION AND IMPORTS OF MOTOR BODIES(a) : AUSTRALIA.**

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Motor Bodies(a)--							(b)
Made .. .. No.	79,436	90,822	114,378	127,709	132,085	123,187	163,994
Assembled from Panels imported or made elsewhere .. .. No.	(c)	21,566	43,077	62,408	94,676	77,548	83,819
Imported (d) .. .. No.	532	7,568	26,874	37,924	19,041	7,062	5,890

(a) Excludes sidecars. (b) Preliminary—subject to revision. (c) Not available. (d) Includes bodies on complete vehicles imported.

12. Agricultural Machines and Implements.—Owing to the extensive agricultural activities conducted in Australia and the demand for modern mechanized farm equipment, the manufacture of agricultural implements constitutes an important branch of Australian

industry. The articles manufactured include a wide range of implements for tillage, seeding and planting, and the harvesting of crops. Other farm machinery made includes windmills, chaff-cutters and machinery used in the dairying industry.

The following table shows details of establishments classified as agricultural implement works in each State for 1956-57 and for Australia for a series of years.

**AGRICULTURAL MACHINES AND IMPLEMENTS.**  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	135	97	47	37	32	..	348
Number of persons employed ..	2,091	5,060	1,353	1,520	363	..	10,387
Salaries and wages paid.. £'000	1,847	4,668	1,032	1,251	309	..	9,107
Value of power, fuel, etc., used							
£'000	87	346	53	84	11	..	581
Value of materials used .. £'000	1,895	6,447	1,055	1,445	242	..	11,084
Value of production .. £'000	2,667	7,621	1,499	1,809	442	..	14,038
Total value of output .. £'000	4,649	14,414	2,607	3,338	695	..	25,703
Value of land and buildings £'000	2,051	2,454	635	672	341	..	6,153
Value of plant and machinery £'000	1,013	2,726	438	513	110	..	4,800
Horse-power of engines ordinarily in use .. .. h.p.	7,359	20,920	5,311	5,646	1,018	..	40,254

**AUSTRALIA.**

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	161	270	293	308	324	348
Number of persons employed ..	6,563	11,608	11,930	12,182	11,938	10,387
Salaries and wages paid .. £'000	1,373	3,838	9,473	10,206	10,364	9,107
Value of power, fuel, etc., used .. £'000	82	600	637	695	670	581
Value of materials used .. £'000	1,485	11,103	12,988	13,572	13,082	11,084
Value of production .. £'000	1,836	12,787	13,924	14,558	14,650	14,038
Total value of output .. £'000	3,403	24,490	27,549	28,825	28,402	25,703
Value of land and buildings .. £'000	997	3,701	3,918	5,038	5,774	6,153
Value of plant and machinery .. £'000	911	3,526	3,627	4,282	4,673	4,800
Horse-power of engines ordinarily in use h.p.	13,346	37,372	39,843	39,858	39,878	40,254

13. **Wireless and Amplifying Apparatus.**—The introduction of wireless broadcasting in 1923 gave rise to a new industry in Australia. Early statistical details of the industry are not available as they were grouped together with other electrical apparatus. In 1930-31, a new classification of factories was adopted and Wireless Apparatus was shown as a separate industry. The industry is confined mainly to New South Wales and Victoria, but is becoming increasingly important in South Australia. During the 1939-45 War, considerable expansion took place in the industry to meet the requirements of the fighting services and apart from a slight drop in output in 1945-46, and in 1952-53, this expansion has continued. The number of broadcast listeners' licences increased from a third of a million in 1930-31 to nearly 2,138,000 at 30th June, 1958 and this increase reflects the advancement of the industry during that period. At 30th June, 1958, 291,000 television viewers' licences had been issued.

**WIRELESS AND AMPLIFYING APPARATUS : AUSTRALIA.**

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	72	149	162	175	181	205
Number of persons employed ..	4,828	6,912	8,125	8,550	9,171	12,074
Salaries and wages paid .. £'000	754	4,707	5,751	6,398	7,051	9,145
Value of power, fuel, etc., used .. £'000	23	179	199	205	231	312
Value of materials used .. £'000	1,356	7,661	9,782	10,076	10,363	16,801
Value of production .. £'000	1,123	6,042	7,454	8,624	8,907	11,767
Total value of output .. £'000	2,502	13,882	17,435	18,905	19,501	28,880
Value of land and buildings .. £'000	558	1,713	2,011	2,300	3,428	4,752
Value of plant and machinery .. £'000	305	969	1,132	1,242	1,761	3,101
Horse-power of engines ordinarily in use h.p.	2,710	10,596	9,274	8,930	9,624	11,658
Wireless receiving sets made(a) .. No.	163,821	298,955	438,978	456,034	458,012	366,282
Television receiving sets made .. No.	..	..	..	..	2,636	121,232

(a) Including radiograms and car radios.

NOTE.—There were 380,000 wireless receiving sets (including radiograms) and 285,000 television receiving sets made in 1957-58.

14. Cotton.—(i) *General.* Cotton has been grown in Australia since 1860, but never on a very large scale. The average annual quantity of unginning cotton produced during the five years ended 1938-39 was 18 million lb. and slightly over 4 million lb. in the five years ended 1956-57. Arising out of the development in the local manufacture of cotton materials and the further expansion following the outbreak of war in 1939, plans were completed for an extension of the area devoted to the cultivation of this crop. The growing of cotton, which is restricted to Queensland, is referred to in some detail in Chapter XXII.—Agricultural Production.

(ii) *Ginning.* The ginning and marketing of cotton is controlled by the Queensland Cotton Board. The Board operates ginneries and processes by-products. The production of raw cotton is insufficient for local factory requirements and is supplemented by imports from overseas, chiefly (in 1957-58) from India, Pakistan, Brazil, Mexico, Peru and the United States of America.

(iii) *Spinning and Weaving.* The post war expansion in the spinning and weaving section of the cotton industry marks an important stage in its development. New factories have been established and Australia is now producing an extensive range of cotton goods, including duck and canvas from cotton or flax, denims, drill, etc., tyre cord and tyre cord fabric. The number of establishments engaged in cotton spinning and weaving in Australia and other particulars of the industry are shown in the following table for the years 1938-39, and 1952-53 to 1956-57.

## COTTON SPINNING AND WEAVING : AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	33	93	96	96	97	91
Number of persons employed .. ..	3,589	7,673	9,470	9,582	9,598	9,754
Salaries and wages paid .. .. £'000	493	5,090	6,602	6,845	7,297	7,799
Value of power, fuel, etc., used .. .. £'000	50	551	690	706	703	890
Value of materials used .. .. £'000	1,357	14,747	18,083	18,505	18,571	19,485
Value of production .. .. £'000	979	8,126	10,809	11,343	12,227	14,202
Total value of output .. .. £'000	2,386	23,424	29,582	30,554	31,501	34,577
Value of land and buildings .. .. £'000	704	3,951	4,104	5,078	5,719	6,478
Value of plant and machinery .. .. £'000	736	4,370	4,411	4,355	4,637	5,312
Horse-power of engines ordinarily in use h.p.	9,128	36,517	33,201	34,356	34,657	34,568

15. Wool Carding, Spinning and Weaving.—The importance of this industry is emphasised by the fact that Australia is the world's chief source of wool and the development of the woollen industry since its establishment at an early period in Australian history is of singular interest. The production consists chiefly of woollen cloth and tweed, worsted cloth, rugs, blankets and yarn, all of which have acquired a reputation for purity and durability.

## WOOL CARDING, SPINNING AND WEAVING.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	44	84	4	3	3	5	143
Number of persons employed .. ..	6,595	12,013	974	640	(a)	(a)	23,217
Salaries and wages paid .. .. £'000	4,524	8,925	560	426	(a)	(a)	16,340
Value of power, fuel, etc., used .. .. £'000	417	812	38	47	(a)	(a)	1,479
Value of materials used .. .. £'000	13,553	24,716	2,340	1,234	(a)	(a)	49,303
Value of production .. .. £'000	7,153	14,674	1,339	646	(a)	(a)	27,649
Total value of output .. .. £'000	21,123	40,202	3,717	1,927	(a)	(a)	78,431
Value of land and buildings .. .. £'000	2,431	5,533	190	252	(a)	(a)	9,019
Value of plant and machinery .. .. £'000	3,077	6,264	327	282	(a)	(a)	10,855
Horse-power of engines ordinarily in use .. .. h.p.	17,556	69,834	3,555	1,876	(a)	(a)	99,385

(a) Not available for publication, figures are included in the total for Australia.

WOOL CARDING, SPINNING AND WEAVING—*continued.*

## AUSTRALIA.

Items.	1938-39. (a)	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. .. .	90	171	164	151	145	143
Number of persons employed .. .. .	19,608	19,729	22,619	21,844	21,899	23,217
Salaries and wages paid .. .. .	£'000 2,888	12,028	14,382	13,945	14,409	16,340
Value of power, fuel, etc., used .. .. .	£'000 393	1,175	1,329	1,288	1,345	1,479
Value of materials used .. .. .	£'000 7,331	34,655	45,033	38,938	39,532	49,303
Value of production .. .. .	£'000 4,791	19,226	23,237	21,898	24,082	27,649
Total value of output .. .. .	£'000 12,515	55,056	69,599	62,124	64,959	78,431
Value of land and buildings .. .. .	£'000 2,380	6,242	6,894	7,369	7,713	9,019
Value of plant and machinery .. .. .	£'000 3,370	8,183	9,086	10,053	10,673	10,855
Horse-power of engines ordinarily in use h.p.	42,944	67,911	68,715	66,817	71,752	99,385
Articles produced—						
Woollen and worsted cloth (b)(c) '000 sq. yds.	31,768	29,400	35,027	31,067	30,279	32,731
Blankets and rugs (b) .. .. .	'000 1,279	1,035	1,340	1,673	1,799	1,841

(a) Includes Woolscouring Works in Victoria and Tasmania and Woolscouring Works and Fellmongeries in South Australia. (b) Includes production in other industries. (c) Includes mixtures.

16. Hosiery and Other Knitted Goods.—Details for each State for 1956-57 and for Australia for a series of years are shown in the following table :—

## HOSIERY AND OTHER KNITTED GOODS.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. .. .	207	429	6	10	10	3	665
Number of persons employed .. .. .	7,280	15,224	584	114	199	91	23,492
Salaries and wages paid .. .. .	£'000 4,987	10,521	333	53	104	54	16,052
Value of power, fuel, etc., used .. .. .	£'000 235	491	8	2	4	4	744
Value of materials used .. .. .	£'000 10,682	22,112	1,560	79	244	92	34,769
Value of production .. .. .	£'000 9,282	18,997	461	79	151	65	29,035
Total value of output .. .. .	£'000 20,199	41,600	2,029	160	399	161	64,548
Value of land and buildings .. .. .	£'000 2,915	6,666	177	42	101	38	9,939
Value of plant and machinery .. .. .	£'000 2,334	5,504	210	25	49	21	8,143
Horse-power of engines ordinarily in use .. .. . h.p.	6,485	15,213	697	222	202	92	22,911

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. .. .	313	587	645	661	664	665
Number of persons employed .. .. .	18,159	20,694	23,937	24,614	23,409	23,492
Salaries and wages paid .. .. .	£'000 2,332	11,641	14,277	15,117	15,117	16,052
Value of power, fuel, etc., used .. .. .	£'000 133	588	684	656	687	744
Value of materials used .. .. .	£'000 4,284	23,939	30,372	31,317	31,822	34,769
Value of production .. .. .	£'000 3,809	21,164	26,155	27,535	27,236	29,035
Total value of output .. .. .	£'000 8,226	45,691	57,211	59,508	59,745	64,548
Value of land and buildings .. .. .	£'000 1,962	6,329	7,253	8,643	9,339	9,939
Value of plant and machinery .. .. .	£'000 1,931	6,038	7,201	7,917	8,159	8,143
Horse-power of engines ordinarily in use h.p.	8,884	17,997	18,478	20,884	20,315	22,911

The following quantities of yarn were used in these establishments during 1956-57:—Worsted or woollen, 8,536,251 lb.; mixtures predominantly woollen or worsted, 1,064,164 lb.; cotton, 9,618,390 lb.; mercerised cotton, 322,135 lb.; cotton and rayon, 11,600 lb.; rayon, spun, 888,478 lb.; rayon filament, 3,646,371 lb.; silk, 4,132 lb.; nylon, spun, 936,332 lb.; nylon filament, 2,358,728 lb.; other yarns, 677,159 lb. Production of garments and stockings is shown in ¶10 (*see p. 182*).

17. Tanning, Currying and Leather Dressing.—(i) *Details of Industry.* In Class VII. the most important industry is tanning. Formerly the production of tanneries in Australia was confined to the coarser sorts of leathers, but there are now very few kinds which cannot be produced locally, and an export trade has been built up in some varieties.

## TANNING, CURRYING AND LEATHER DRESSING.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	65	40	13	9	5	1	133
Number of persons employed ..	1,782	1,994	583	199	(a)	(a)	4,746
Salaries and wages paid .. £'000	1,722	1,851	473	183	(a)	(a)	4,383
Value of power, fuel, etc., used £'000	188	185	40	21	(a)	(a)	446
Value of materials used .. £'000	4,773	4,409	1,576	538	(a)	(a)	11,738
Value of production .. £'000	2,130	2,388	699	329	(a)	(a)	5,736
Total value of output .. £'000	7,091	6,982	2,315	888	(a)	(a)	17,920
Value of land and buildings £'000	968	1,074	107	87	(a)	(a)	2,314
Value of plant and machinery £'000	891	906	257	149	(a)	(a)	2,264
Horse-power of engines ordinarily in use .. h.p.	11,622	12,669	3,711	1,691	(a)	(a)	30,799

(a) Not available for publication; figures are included in the total for Australia.

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories ..	132	141	142	140	137	133
Number of persons employed ..	4,375	5,240	5,445	5,393	4,972	4,746
Salaries and wages paid .. £'000	920	4,163	4,464	4,518	4,468	4,383
Value of power, fuel, etc., used .. £'000	88	382	417	408	415	446
Value of materials used .. £'000	2,983	9,488	10,477	10,675	11,180	11,738
Value of production .. £'000	1,522	5,983	6,672	6,743	6,082	5,736
Total value of output .. £'000	4,593	15,853	17,566	17,826	17,677	17,920
Value of land and buildings .. £'000	814	1,983	2,055	2,219	2,176	2,314
Value of plant and machinery .. £'000	524	1,832	1,990	2,128	2,231	2,264
Horse-power of engines ordinarily in use h.p.	12,345	30,314	31,182	31,708	31,590	30,799

(ii) *Materials Used and Articles Produced.* The quantities of materials used and leather produced in tanneries in each State in 1956-57 are shown in the following table :—

## TANNERIES : MATERIALS USED AND PRODUCTION, 1956-57.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>Materials used—</b>							
<b>Hides (cattle)—</b>							
Yearling .. No.	124,377	36,609	11,363	(a)	(a)	..	180,858
Light Hides(b) ..	310,574	525,593	193,975	63,742	(a)	(a)	1,148,427
Heavy Hides(c) ..	428,302	476,953	193,594	63,041	(a)	(a)	1,226,784
<b>Skins—</b>							
Calf ..	714,367	278,914	102,296	(a)	..	(a)	1,097,011
Goat ..	(a)	(a)	(a)	..	..	..	391,664
Sheep including Pelts ..	2,004,556	457,069	(a)	(a)	..	..	2,951,531
Marsupial ..	24,877	(a)	(a)	(a)	(a)	..	89,137
<b>Bark used—</b>							
Wattle .. tons	2,133	5,092	847	(a)	..	(a)	8,838
Mallet and Other ..	(a)	(a)	(a)	(a)	(a)	..	901
Tanning extract (veg.) used ..	2,231	2,917	1,823	(a)	799	(a)	8,163
<b>Articles produced—</b>							
<b>Leather made—</b>							
Sole .. lb.	8,189,254	13,976,306	5,947,926	(a)	1,881,759	(a)	30,583,326
Harness, Belting, etc. ..	656,124	422,132	(a)	(a)	(a)	..	2,553,279
Upholstery .. sq. ft.	(a)	1,005,848	(a)	(a)	(a)	..	1,433,819
<b>Dressed and Upper from Hides—</b>							
<b>Sold by Measurement—</b>							
Patent .. sq. ft.	(a)	1,684,902	..	(a)	..	..	2,796,060
All Other ..	20,336,902	19,685,917	8,320,415	3,835,492	(a)	(a)	53,814,694
<b>Sold by Weight (all kinds) .. lb.</b>	47,903	(a)	(a)	..	(a)	(a)	162,160
<b>Dressed from skins—</b>							
Calf .. sq. ft.	4,488,142	2,096,728	678,054	(a)	(a)	(a)	7,272,663
Goat ..	1,768,157	(a)	(a)	..	..	..	1,875,547
Sheep ..	8,100,665	1,142,573	(a)	(a)	..	..	11,221,661
Marsupial ..	122,481	650,442	(a)	(a)	(a)	..	960,174

(a) Not available for publication; figures are included in the total for Australia

(b) Up to 45 lb.

(c) Over 45 lb.

18. Tailoring and Ready-made Clothing.—Statistics showing the distribution of this industry among the States in 1956-57 and for Australia for a series of years are shown in the following table :—

## TAILORING AND READY-MADE CLOTHING.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	964	621	125	101	119	14	1,944
Number of persons employed ..	17,202	10,163	2,218	1,419	736	182	31,920
Salaries and wages paid .. £'000	10,091	6,497	1,019	720	336	97	18,760
Value of power, fuel, etc., used .. £'000	217	144	23	20	10	2	416
Value of materials used .. £'000	19,020	13,078	2,319	850	542	74	35,883
Value of production .. £'000	15,930	10,481	1,717	1,001	552	130	29,811
Total value of output .. £'000	35,167	23,703	4,059	1,871	1,104	206	66,110
Value of land and buildings .. £'000	5,061	3,420	642	588	361	65	10,137
Value of plant and machinery .. £'000	1,506	1,067	141	96	42	9	2,861
Horse-power of engines ordinarily in use .. h.p.	4,952	3,099	506	383	166	27	9,133

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	1,177	1,961	1,963	1,985	1,952	1,944
Number of persons employed ..	26,499	32,209	33,264	33,384	32,587	31,920
Salaries and wages paid .. £'000	3,168	15,681	17,215	17,968	18,261	18,760
Value of power, fuel, etc., used .. £'000	72	363	380	390	393	416
Value of materials used .. £'000	4,947	28,767	33,598	34,237	35,941	35,883
Value of production .. £'000	4,812	23,581	26,076	28,031	28,940	29,811
Total value of output .. £'000	9,831	52,711	60,054	62,658	65,274	66,110
Value of land and buildings .. £'000	3,176	7,573	8,251	8,917	9,484	10,137
Value of plant and machinery .. £'000	356	2,469	2,523	2,663	2,746	2,861
Horse-power of engines ordinarily in use h.p.	2,607	10,693	9,339	9,198	9,017	9,133

19. Dressmaking and Millinery Establishments.—Particulars of dressmaking and millinery establishments in Australia for the years 1938-39 and 1952-53 to 1956-57 are shown in the following table :—

## DRESSMAKING AND MILLINERY : AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	869	1,405	1,433	1,411	1,410	1,311
Number of persons employed ..	16,398	18,913	19,197	18,014	17,675	16,265
Salaries and wages paid .. £'000	1,653	8,490	9,230	8,975	9,063	8,783
Value of power, fuel, etc., used .. £'000	33	170	187	176	177	185
Value of materials used .. £'000	2,610	11,746	13,634	13,109	13,029	12,447
Value of production .. £'000	2,592	13,193	14,392	14,501	14,585	14,244
Total value of output .. £'000	5,235	25,109	28,213	27,786	27,791	26,876
Value of land and buildings .. £'000	2,052	4,726	5,033	5,256	5,788	5,966
Value of plant and machinery .. £'000	189	1,065	1,108	1,123	1,174	1,152
Horse-power of engines ordinarily in use h.p.	1,732	4,790	4,858	4,740	4,697	4,635

20. Shirts, Collars and Underclothing.—Particulars of this industry are shown below for each State for 1956-57 and for Australia for a series of years :—

## SHIRTS, COLLARS AND UNDERCLOTHING.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	163	176	19	23	14	2	397
Number of persons employed ..	4,509	6,625	1,053	424	(a)	(a)	13,157
Salaries and wages paid .. £'000	2,653	4,036	492	206	(a)	(a)	7,640
Value of power, fuel, etc., used .. £'000	51	61	8	4	(a)	(a)	129
Value of materials used .. £'000	6,785	8,140	748	259	(a)	(a)	16,285
Value of production .. £'000	4,184	6,452	699	294	(a)	(a)	12,051
Total value of output .. £'000	11,020	14,653	1,455	557	(a)	(a)	28,465
Value of land and buildings .. £'000	1,345	1,814	179	91	(a)	(a)	3,543
Value of plant and machinery .. £'000	480	615	66	25	(a)	(a)	1,229
Horse-power of engines ordinarily in use .. h.p.	1,680	2,905	258	158	(a)	(a)	5,177

(a) Not available for publication ; figures are included in the total for Australia.

SHIRTS, COLLARS AND UNDERCLOTHING—*continued.*  
AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	283	379	379	392	404	397
Number of persons employed .. ..	11,081	9,657	11,156	12,745	12,686	13,157
Salaries and wages paid .. .. £'000	1,143	4,397	5,684	6,702	6,957	7,640
Value of power, fuel, etc., used .. .. £'000	23	76	92	106	119	129
Value of materials used .. .. £'000	2,651	9,670	12,077	15,020	16,112	16,285
Value of production .. .. £'000	1,761	7,524	9,377	10,927	11,328	12,051
Total value of output .. .. £'000	4,435	17,270	21,546	26,053	27,559	28,465
Value of land and buildings .. .. £'000	946	2,151	2,417	2,719	2,999	3,543
Value of plant and machinery .. .. £'000	231	846	905	1,053	1,146	1,229
Horse-power of engines ordinarily in use h.p.	1,874	4,779	4,320	4,468	4,881	5,177

21. Boots and Shoes.—(i) *Details of Industry.* Boot and shoe factories hold an important place in respect of both employment afforded and extent of output. The following tables refer to boot and shoe factories as distinct from those devoted to repairing, except in Tasmania, where it has been necessary to include details of boot and shoe repairing, in order to avoid disclosure of confidential information for that State. Factories engaged in the manufacture of sand shoes, goloshes and gum, etc., boots of rubber are not included here, being classified under Rubber Goods, *see* para. 38, page 210.

BOOTS AND SHOES.  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Aust.
Number of factories .. ..	176	222	29	18	11	18	474
Number of persons employed .. ..	6,996	11,136	1,416	1,162	592	130	21,432
Salaries and wages paid .. .. £'000	5,026	7,974	896	867	383	88	15,234
Value of power, fuel, etc., used .. .. £'000	88	134	12	14	7	2	257
Value of materials used .. .. £'000	6,958	12,027	1,441	1,223	439	133	22,221
Value of production .. .. £'000	7,155	11,171	1,102	1,132	530	132	21,222
Total value of output .. .. £'000	14,201	23,332	2,555	2,369	976	267	43,700
Value of land and buildings .. .. £'000	1,528	2,023	206	295	166	49	4,267
Value of plant and machinery .. .. £'000	816	2,081	330	339	128	21	3,715
Horse-power of engines ordinarily in use .. .. h.p.	4,672	9,265	958	880	600	121	16,496

## AUSTRALIA.

Items.	1945-46.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	383	509	520	516	494	474
Number of persons employed .. ..	18,264	20,920	22,953	22,323	21,557	21,432
Salaries and wages paid .. .. £'000	4,408	12,430	14,215	14,241	14,310	15,234
Value of power, fuel, etc., used .. .. £'000	75	197	225	227	233	257
Value of materials used .. .. £'000	7,520	17,668	20,508	21,020	21,812	22,221
Value of production .. .. £'000	6,472	17,162	19,444	19,640	20,480	21,222
Total value of output .. .. £'000	14,067	35,027	40,177	40,887	42,525	43,700
Value of land and buildings .. .. £'000	1,518	3,227	3,491	3,733	3,846	4,267
Value of plant and machinery .. .. £'000	1,222	2,653	3,152	3,380	3,646	3,715
Horse-power of engines ordinarily in use h.p.	9,678	18,214	16,679	17,488	16,485	16,496

(a) Includes details of boot and shoe repairing.

(ii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers made in factories producing boots and shoes in each State are shown for 1956-57 in the following table. Particulars relating to the output of sand shoes, goloshes and gum, etc., boots of rubber are not included:—

## BOOT AND SHOE FACTORIES : OUTPUT, 1956-57.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Boots, shoes and sandals .. .. pairs	7,145,572	10,125,340	1,410,572	1,530,667	(a)	(a)	20,861,361
Slippers .. .. pairs	12,976,752	20,202,844	2,214,450	2,310,565	(a)	(a)	38,621,389
.. .. £	1,847,941	5,055,132	338,467	69,546	373,138	..	7,684,224
.. .. £	1,459,911	2,771,413	203,523	38,619	245,298	..	4,718,764

(a) Not available for publication; figures are included in the total for Australia.

Preliminary figures for 1957-58 were—Boots, Shoes and Sandals, 21,541,000 pairs; and Slippers, 8,905,000 pairs.

22. Flour-milling.—(i) *Details of Industry.* The following table shows the position of the flour-milling industry in each State for the year 1956-57 and for Australia for a series of years:—

## FLOUR-MILLING.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	46	34	11	22	20	10	143
Number of persons employed ..	1,663	1,391	571	463	504	137	4,729
Salaries and wages paid .. £'000	1,681	1,244	477	421	422	130	4,375
Value of power, fuel, etc., used	£'000 408	223	90	93	115	17	946
Value of materials used .. £'000	21,942	17,797	6,061	5,889	6,280	1,125	59,094
Value of production .. £'000	4,599	2,417	961	689	759	183	9,608
Total value of output .. £'000	26,949	20,437	7,112	6,671	7,154	1,325	69,648
Value of land and buildings £'000	2,160	1,565	789	312	786	74	5,686
Value of plant and machinery £'000	2,461	1,353	753	418	624	81	5,690
Horse-power of engines ordinarily in use .. .. h.p.	17,423	15,404	4,799	3,891	5,407	1,179	48,103

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	172	158	157	151	151	143
Number of persons employed ..	3,783	4,892	4,602	4,528	4,548	4,729
Salaries and wages paid .. £'000	896	3,884	3,847	3,851	4,073	4,375
Value of power, fuel, etc., used .. £'000	231	866	847	805	835	946
Value of materials used .. £'000	10,573	51,373	53,946	54,436	54,498	59,094
Value of production .. £'000	2,091	8,296	8,134	7,311	7,575	9,608
Total value of output .. £'000	12,895	60,535	62,927	62,552	62,908	69,648
Value of land and buildings .. £'000	2,091	3,912	4,260	4,533	5,211	5,686
Value of plant and machinery .. £'000	1,814	4,531	4,921	5,060	5,405	5,690
Horse-power of engines ordinarily in use h.p.	27,795	44,781	52,545	46,566	47,786	48,103

(ii) *Production of Flour and By-products.* The production of flour by the mills in each State (including other than flour mills) for the years 1938-39 and 1952-53 to 1957-58 was as follows:—

## FLOUR-MILLING : PRODUCTION OF FLOUR. (a)

(Tons of 2,000 lb.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 ..	547,162	436,829	84,314	146,262	138,583	19,582	1,372,732
1952-53 ..	543,693	592,465	132,839	201,685	227,269	28,349	1,726,300
1953-54 ..	603,575	473,842	138,524	164,907	197,654	30,556	1,609,058
1954-55 ..	586,549	455,906	157,904	143,840	178,851	29,969	1,553,019
1955-56 ..	571,084	454,628	169,793	154,327	193,490	27,983	1,571,305
1956-57 ..	621,476	461,663	170,397	164,417	184,717	29,157	1,631,827
1957-58 (b) ..	398,525	478,520	143,247	139,601	168,869	28,350	1,357,112

(a) Includes wheatmeal for baking and sharps.

(b) Preliminary, subject to revision.

In addition, 633,000 tons (2,000 lb. per ton) of bran and pollard were produced in 1956-57 and 500,000 tons in 1957-58. The total quantity of wheat ground in flour mills was 74,203,000 bushels in 1956-57 and 62,820,000 bushels in 1957-58.

23. **Bakeries.**—Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on is given in the table below. It should be noted, however, that the details refer only to establishments coming within the definition of a factory as explained at the beginning of this section. For that reason, the tables do not give complete details of the industry, as a large number of bakeries, etc. not coming within the definition are excluded. This is true of all other industries covered by the statistics of manufacturing production, but, in view of the omission of such a large number of establishments in this instance, special mention is deemed necessary.

## BAKERIES (INCLUDING CAKES AND PASTRY).

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Aust.
Number of factories .. ..	1,542	1,052	497	270	299	153	3,813
Number of persons employed ..	7,535	5,694	2,344	1,606	1,058	1,727	19,964
Salaries and wages paid .. £'000	4,890	3,618	1,224	1,015	582	1,334	12,663
Value of power, fuel, etc., used £'000	947	661	237	178	120	165	2,308
Value of materials used .. £'000	15,149	10,682	4,320	3,300	2,165	5,088	40,704
Value of production .. £'000	11,341	8,824	2,939	2,302	1,470	2,830	29,706
Total value of output .. £'000	27,437	20,167	7,496	5,780	3,755	8,083	72,718
Value of land and buildings £'000	7,238	5,728	1,310	1,360	888	1,467	17,991
Value of plant and machinery £'000	3,960	3,325	874	888	599	944	10,590
Horse-power of engines ordinarily in use .. .. . h.p.	10,557	7,486	2,952	2,950	1,942	4,317	30,204

## AUSTRALIA.(a)

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	1,958	3,534	3,687	3,800	3,878	3,813
Number of persons employed .. ..	11,715	18,405	18,758	19,125	19,543	19,964
Salaries and wages paid .. .. £'000	1,993	9,368	9,954	10,648	11,611	12,663
Value of power, fuel, etc., used .. .. £'000	306	1,694	1,805	1,902	2,090	2,308
Value of materials used .. .. £'000	6,651	29,672	32,829	35,899	37,820	40,704
Value of production .. .. £'000	4,509	21,788	23,107	23,582	26,418	29,706
Total value of output .. .. £'000	11,466	53,154	57,741	61,383	66,328	72,718
Value of land and buildings .. .. £'000	4,960	12,145	13,617	14,352	15,865	17,991
Value of plant and machinery .. .. £'000	1,478	6,073	7,158	8,373	9,461	10,590
Horse-power of engines ordinarily in use h.p.	10,855	23,792	26,462	27,815	29,535	30,204

(a) Includes confectionery in Tasmania.

24. **Sugar-mills.**—(i) *General.* Sugar-cane is grown in New South Wales and Queensland and particulars of area, yield, etc., are given in extended detail in Chapter XXII.—Agricultural Production.

The products of the sugar-mill are raw sugar and molasses, the former being sent to the refineries in different parts of Australia for further treatment. Particulars of cane crushed and sugar produced embodied in the following table refer to the quantities treated during the years ended 30th June, irrespective of the season in which the cane was grown ; consequently, the figures relating to cane crushed and sugar produced may differ slightly from those given in Chapter XXII.—Agricultural Production, which relate to harvest years.

(ii) *Details for States.* The following table shows details of the operations of sugar mills in New South Wales and Queensland for the years 1938–39 and 1952–53 to 1956–57 :—

## SUGAR-MILLS.

Items.	1938–39.	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.
NEW SOUTH WALES.						
Number of factories ..	3	3	3	3	3	3
Number of persons employed ..	212	138	156	187	152	153
Cane crushed .. tons	337,038	125,714	263,249	222,313	284,539	294,087
Raw sugar produced (94 net titre) .. tons	45,106	14,272	34,004	26,301	36,028	35,918
QUEENSLAND.						
Number of factories ..	33	31	31	31	31	31
Number of persons employed ..	4,419	6,495	7,358	7,272	7,044	7,099
Cane crushed .. tons	5,432,193	6,841,536	8,751,063	9,864,304	8,616,163	8,978,081
Raw sugar produced (94 net titre) .. tons	775,064	934,614	1,220,383	1,301,245	1,135,685	1,171,879
Molasses—						
Sold to distilleries .. '000 gals	8,276	15,774	23,323	23,167	22,772	24,034
Used as fodder .. " "	4,237	5,887	5,486	5,753	5,285	5,522
Used as manure .. " "	3,293	7,499	11,466	10,501	10,637	9,154
Run to waste .. " "	499	76	168	233	185	51
Burnt as fuel .. " "	3,749	934	183	1,079	1,519	1,402
Sold or used for other purposes .. '000 gals	232	426	516	473	588	521
Total molasses disposed of .. '000 gals	20,286	30,596	41,142	41,206	40,986	40,684

25. *Sugar-refining.*—The establishment of the sugar-refining industry considerably antedates the establishment of the sugar-milling industry, the raw material operated on in the earlier years coming chiefly from Mauritius and the East. In 1956–57, there were two sugar refineries in Queensland and one each in New South Wales, Victoria, South Australia and Western Australia. The total quantity of raw sugar treated amounted to 499,289 tons for a yield of 480,393 tons of refined sugar.

26. *Confectionery.*—The figures for 1956–57 for each State and for Australia for a series of years are shown hereunder :—

## CONFECTIONERY.

1956–57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(b)
Number of factories ..	91	82	18	16	6	(a)	213
Number of persons employed ..	3,044	2,938	210	327	299	(a)	6,818
Salaries and wages paid .. £'000	2,333	2,068	97	191	177	(a)	4,866
Value of power, fuel, etc., used .. £'000	259	205	8	21	16	(a)	509
Value of materials used .. £'000	8,051	6,092	279	504	465	(a)	15,391
Value of production .. £'000	5,549	3,525	230	274	307	(a)	9,885
Total value of output .. £'000	13,859	9,822	517	799	788	(a)	25,785
Value of land and buildings .. £'000	1,411	1,412	124	208	84	(a)	3,239
Value of plant and machinery .. £'000	1,608	1,705	72	121	76	(a)	3,582
Horse-power of engines ordinarily in use .. h.p.	12,308	12,816	413	1,342	469	(a)	27,348

## AUSTRALIA.(b)

Items.	1938–39.	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.
Number of factories ..	148	256	249	238	226	213
Number of persons employed ..	7,256	6,873	6,976	7,069	7,183	6,818
Salaries and wages paid .. £'000	1,041	4,084	4,382	4,516	4,805	4,866
Value of power, fuel, etc., used .. £'000	107	436	444	447	473	509
Value of materials used .. £'000	3,102	12,554	13,857	14,917	15,583	15,391
Value of production .. £'000	2,418	7,910	8,307	8,320	8,932	9,885
Total value of output .. £'000	5,627	20,900	22,608	23,684	24,988	25,785
Value of land and buildings .. £'000	1,423	2,510	2,650	2,964	3,324	3,239
Value of plant and machinery .. £'000	1,364	2,872	3,039	3,368	3,612	3,582
Horse-power of engines ordinarily in use .. h.p.	16,154	26,002	28,763	27,374	29,156	27,348

(a) Not available for publication. Included with bakeries.

(b) Excludes Tasmania.

27. Jam, Fruit and Vegetable Canning, Pickles, Sauces, Vinegar.—(i) *Details of Industry.* The following table shows particulars of factories included in this class for each State for 1956–57 and for Australia for a series of years :—

**JAM, FRUIT AND VEGETABLE CANNING, PICKLES, SAUCES, VINEGAR.  
1956–57.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	59	60	15	19	9	20	182
Number of persons employed ..	2,880	4,965	1,531	1,369	151	1,123	12,019
Salaries and wages paid .. £'000	2,324	4,321	1,110	983	98	862	9,698
Value of power, fuel, etc., used £'000	253	481	75	68	8	72	957
Value of materials used .. £'000	8,725	20,746	5,038	2,942	399	2,024	39,874
Value of production .. .. £'000	4,550	9,230	1,820	1,693	208	1,291	18,792
Total value of output .. .. £'000	13,528	30,457	6,933	4,703	615	3,387	59,623
Value of land and buildings .. £'000	2,001	5,633	741	461	140	814	9,790
Value of plant and machinery .. £'000	1,600	5,297	475	489	45	846	8,752
Horse-power of engines ordinarily in use .. .. h.p.	9,577	27,465	2,971	1,931	337	3,539	45,820

**AUSTRALIA.**

Items.	1938–39.	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.
Number of factories .. ..	123	204	197	184	183	182
Number of persons employed ..	6,476	10,845	11,101	11,061	11,578	12,019
Salaries and wages paid .. .. £'000	1,149	9,391	7,870	7,945	8,924	9,698
Value of power, fuel, etc., used .. £'000	97	636	660	699	802	957
Value of materials used .. .. £'000	4,800	27,228	28,875	29,708	32,323	39,874
Value of production .. .. £'000	2,334	12,662	14,992	15,312	16,103	18,792
Total value of output .. .. £'000	7,231	40,526	44,527	45,719	49,228	59,623
Value of land and buildings .. .. £'000	1,382	6,025	6,137	6,193	8,874	9,790
Value of plant and machinery .. .. £'000	721	5,095	5,404	5,496	8,083	8,752
Horse-power of engines ordinarily in use .. h.p.	7,873	30,241	31,721	32,661	38,508	45,820

(ii) *Production.* During the 1939–45 War, production of jams increased greatly and an output of 171 million lb. was attained in 1943–44. Production afterwards decreased, but attained a new record of 198.5 million lb. in 1947–48. It dropped to 92.2 million lb. in 1956–57. Preliminary figures for 1957–58 show production as being 108.0 million lb.

The peak output of preserved fruit occurred in 1953–54 with 338.6 million lb. compared with the previous highest level of 256.1 million lb. attained in 1951–52. Production in 1956–57 was 289.5 million lb. and preliminary figures for 1957–58 show production as being 340.3 million lb.

There has also been a marked development in the production of canned vegetables. In 1938–39, output totalled 10.3 million lb. but, as a result of the war-time demand by the armed services, production reached the record level of 119.1 million lb. in 1944–45. However, it has since declined and in 1956–57 amounted to 98.4 million lb. Preliminary figures for 1957–58 show production as being 85.1 million lb.

The following table shows the total quantity and value of jams, pickles, sauces and other items manufactured in each State in 1956–57 :—

**JAMS, PRESERVED FRUIT AND VEGETABLES, PICKLES AND SAUCES : 1956-57.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Jams .. .. '000 lb.	22,639	40,777	11,610	(a)	(a)	(a)	92,208
Fruit, preserved .. ..	38,539	138,236	58,801	42,967	(a)	(a)	289,510
Fruit Pulp(b) .. ..	41,089	57,243	6,056	(a)	7,425	(a)	290,975
Fruit Juices, natural .. .. cwt.	265	123	2,562	134	(a)	(a)	3,298
Vegetables, preserved .. .. '000 lb.	37,082	40,773	197	3,869	2,253	14,244	98,418
Pickled Vegetables .. ..	3,001	837	31	1,679	348	..	5,896
Tomato Pulp(b) .. .. cwt.	132,194	853,998	(a)	63,477	93,544	(a)	1,167,335
Tomato Paste, Puree, etc., '000 pints	1,400	2,547	..	(a)	(a)	..	4,508
Tomato Juice .. .. '000 gals.	189	725	..	(a)	(a)	..	1,508
Pickles .. .. '000 pints	3,801	2,531	(a)	(a)	(a)	..	8,119
Chutney .. .. " "	573	(a)	(a)	(a)	(a)	..	1,409
Sauces .. .. " "	12,052	16,228	1,844	2,308	(a)	(a)	33,494
Soup (canned) .. .. " "	5,192	38,604	(a)	(a)	(a)	(a)	44,538
Soup, Dry Mix .. .. '000 lb.	(a)	(a)	(a)	(a)	(a)	..	4,525

(a) Not available for publication. Figures are included in the total for Australia. (b) Including quantities made and used in the works producing them.

28. Bacon-curing.—(i) *Details of Industry.* The table hereunder shows particulars of factories engaged in bacon-curing in each State for 1956-57 and for Australia for a series of years :—

**BACON-CURING.**  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	29	15	9	14	4	10	81
Number of persons employed ..	657	775	1,243	449	254	94	3,472
Salaries and wages paid .. £'000	598	665	997	409	195	92	2,956
Value of power, fuel, etc., used .. £'000	78	80	97	62	35	10	362
Value of materials used .. £'000	4,981	4,427	7,346	2,456	2,442	721	22,373
Value of production .. £'000	1,174	1,353	1,671	560	338	177	5,273
Total value of output .. £'000	6,233	5,860	9,114	3,078	2,815	908	28,008
Value of land and buildings .. £'000	513	594	728	361	112	144	2,452
Value of plant and machinery .. £'000	279	322	543	270	58	40	1,512
Horse-power of engines ordinarily in use .. h.p.	2,225	3,049	4,688	2,170	841	499	13,472

**AUSTRALIA.**

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories ..	76	85	85	84	82	81
Number of persons employed ..	2,047	2,994	2,975	3,201	3,414	3,472
Salaries and wages paid .. £'000	480	2,225	2,270	2,517	2,754	2,956
Value of power, fuel, etc., used .. £'000	77	292	298	322	339	362
Value of materials used .. £'000	3,768	18,836	19,448	18,318	20,814	22,373
Value of production .. £'000	865	4,026	4,410	5,715	4,997	5,273
Total value of output .. £'000	4,710	23,154	24,156	24,355	26,150	28,008
Value of land and buildings .. £'000	750	1,635	1,737	1,956	2,308	2,452
Value of plant and machinery .. £'000	357	917	955	1,100	1,329	1,512
Horse-power of engines ordinarily in use .. h.p.	9,389	11,636	11,685	11,791	13,019	13,472

(ii) *Quantity of Production.* The number of pigs cured and the quantity of bacon and ham and lard produced in factories in each State for 1956-57 are shown in the following table :—

**BACON-CURING FACTORIES : PIGS CURED AND PRODUCTION, 1956-57.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Pigs killed for bacon and ham—							
For curing on own account	178,959	144,262	240,056	69,225	} 94,856	} 30,310	{ 757,229
For curing on commission	10,255	1,952	1,212	570			
Pork and green bacon used for—							
Curing on own account '000 lb.	3,148	2,260	(a)	966	(a)	..	7,282
Curing on commission '000 lb.	4,484	52	..	(a)	(a)	(a)	4,556
Sugar used .. ton	46	23	154	20	27	14	284
Finished bacon and ham made (b)—							
On own account '000 lb.	15,899	15,040	19,066	7,023	6,825	1,893	65,746
On commission ..	4,996	190	131	56	15	22	5,410
Green bacon and ham ..	376	1,950	409	452	1,081	413	4,681
Lard produced .. cwt.	3,326	6,555	20,695	4,952	6,290	944	42,762

(a) Not available for publication ; figures are included in the total for Australia. (b) Includes smoked bacon and ham, cooked ham (not smoked) made for retail sale, and canned bacon and ham.

Bacon and ham and other pig products are dealt with more fully in Chapter XXIV.—Farmyard, Dairy and Bee Products.

29. Butter, Cheese and Condensed and Dried Milk.—(i) *Details of Industry.* The following table shows particulars of butter, cheese and condensed and dried milk factories in each State for 1956-57 and for Australia for a series of years.

**BUTTER, CHEESE AND CONDENSED AND DRIED MILK.**  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	75	131	83	42	18	22	371
Number of persons employed ..	2,396	5,620	1,669	819	312	373	11,189
Salaries and wages paid .. £'000	2,178	5,381	1,288	630	249	342	10,068
Value of power, fuel, etc., used £'000	659	1,598	279	117	70	74	2,797
Value of materials used .. £'000	16,211	51,561	20,668	5,211	3,425	4,441	101,517
Value of production .. £'000	3,746	10,567	2,467	1,118	530	837	19,265
Total value of output .. £'000	20,616	63,726	23,414	6,446	4,025	5,352	123,579
Value of land and buildings £'000	3,175	5,836	1,689	729	225	331	11,985
Value of plant and machinery £'000	3,695	7,031	2,519	721	367	298	14,631
Horse-power of engines ordinarily in use .. .. h.p.	29,965	40,031	25,001	8,297	2,393	2,470	108,157

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	523	384	380	379	375	371
Number of persons employed ..	6,851	10,641	10,580	10,567	11,119	11,189
Salaries and wages paid .. £'000	1,570	8,098	8,416	8,680	9,568	10,068
Value of power, fuel, etc., used £'000	390	2,339	2,396	2,423	2,741	2,797
Value of materials used .. £'000	29,162	97,291	94,020	100,706	106,883	101,517
Value of production .. £'000	3,543	14,350	15,914	15,394	18,893	19,265
Total value of output .. £'000	33,095	113,980	112,330	118,523	128,517	123,579
Value of land and buildings £'000	2,880	7,571	9,365	10,337	11,188	11,985
Value of plant and machinery £'000	3,067	10,250	12,083	12,553	13,923	14,631
Horse-power of engines ordinarily in use .. .. h.p.	45,059	84,428	94,863	98,442	102,182	108,157

(ii) *Quantity and Value of Production.* The next table shows the quantities and values of butter, cheese and condensed milk produced and the quantities of milk used in their production during 1956-57. These details are restricted to factory production and therefore exclude farm output.

**BUTTER, CHEESE AND CONDENSED MILK, ETC., FACTORIES : PRODUCTION, 1956-57.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>MATERIALS USED.</b>							
Whole Milk used in manufacture of							
Butter .. .. '000 gal.	166,230	412,709	184,863	36,278	34,592	48,456	883,128
Cheese .. .. '000 gal.	8,952	43,865	15,965	25,964	2,531	747	98,024
Condensed, Dried and other Milk Products .. .. '000 gal.	15,146	63,857	3,926	(a)	(a)	(a)	88,862
Sugar .. .. ton	(a)	16,392	(a)	..	(a)	(a)	19,176

## PRODUCTION.

	Ton.	Ton.	Ton.	Ton.	Ton.	Ton.	Ton.
Butter .. ..	33,826	88,598	41,089	8,440	7,462	10,426	189,841
Cheese (Green Weight) .. ..	4,019	20,541	7,137	11,959	1,182	333	45,171
Condensed Milk (Sweetened and Unsweetened) .. ..	(a)	45,589	..	..	(a)	..	49,701
Concentrated—							
Whole Milk .. ..	(a)	(a)	(a)	..	(a)	(a)	..
Skim Milk .. ..	(a)	(a)	(a)	..	(a)	..	15,145
Powdered Full Cream Milk—							
Spray .. ..	(a)	10,551	(a)	(a)	..	(a)	16,508
Roller .. ..	(a)	376	(a)	..	..	(a)	1,356
Infants' and Invalids' Foods (including Malted Milk and Milk Sugar (Lactose)) .. ..	(a)	(a)	..	..	..	(a)	13,567
Powdered Skim Milk—							
Spray .. ..	8,454	20,718	(a)	(a)	(a)	..	23,170
Roller .. ..	..	..	..	..	..	..	7,397
Buttermilk and Whey Powder .. ..	935	3,489	738	(a)	(a)	..	5,552
Casein .. ..	(a)	7,297	(a)	..	..	..	7,730
Ice Cream Mix—							
Powder .. ..	(a)	(a)	(a)	(a)	(a)	..	515
Liquid .. ..	(a)	(a)	(a)	..	..	..	3,687
Processed Cheese, Cheese Paste and Cheese Spreads(b) .. ..	(a)	(a)	(a)	..	..	..	15,312

(a) Not available for publication; figures are included in the total for Australia. (b) The cheese used in the manufacture of these products is included in Cheese (Green Weight) made as shown above.

The butter, cheese and condensed milk industries are dealt with more fully in Chapter XXIV.—Farmyard, Dairy and Bee Products.

30. **Meat and Fish Preserving.**—The industries included in this group are engaged chiefly in the freezing and preserving of meat. Works have been established at the seaports for the purpose of handling beef, lamb and mutton for export, and insulated space for the carriage of chilled and frozen produce is provided by shipping companies trading between Australia and other parts of the world. The substitution of chilled for frozen meat exported is referred to in Chapter XXIII.—Pastoral Production. In recent years, there has been considerable expansion in the canning of meat and fish.

#### MEAT AND FISH PRESERVING.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	11	15	29	19	35	4	113
Number of persons employed ..	559	653	6,227	(a)	1,101	(a)	8,866
Salaries and wages paid .. £'000	452	614	6,038	(a)	1,033	(a)	8,366
Value of power, fuel, etc., used £'000	84	97	764	(a)	123	(a)	1,099
Value of materials used .. £'000	2,408	3,345	35,278	(a)	3,121	(a)	45,483
Value of production .. £'000	1,050	1,158	10,065	(a)	1,672	(a)	14,385
Total value of output .. £'000	3,452	4,600	46,107	(a)	4,916	(a)	60,967
Value of land and buildings £'000	316	684	3,139	(a)	1,834	(a)	6,241
Value of plant and machinery £'000	303	739	2,133	(a)	797	(a)	4,147
Horse-power of engines ordinarily in use .. .. h.p.	1,944	3,219	23,317	(a)	6,781	(a)	36,517

(a) Not available for publication; figures are included in the total for Australia.

#### AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	32	98	106	114	116	113
Number of persons employed ..	4,093	8,771	9,113	9,432	9,550	8,866
Salaries and wages paid .. £'000	1,180	6,820	7,395	8,327	8,704	8,366
Value of power, fuel, etc., used £'000	134	972	1,015	1,110	1,119	1,099
Value of materials used .. £'000	6,351	47,637	46,671	46,642	46,359	45,483
Value of production .. £'000	1,601	12,126	11,374	12,182	14,345	14,385
Total value of output .. £'000	8,086	60,735	59,060	59,934	61,823	60,967
Value of land and buildings £'000	1,966	4,562	4,300	5,403	5,934	6,241
Value of plant and machinery £'000	1,325	2,786	2,826	3,409	4,118	4,147
Horse-power of engines ordinarily in use .. .. h.p.	13,385	33,328	31,810	35,600	33,086	36,517

Particulars of the quantities and values of beef, mutton and lamb preserved by cold process exported from Australia over a series of years will be found in Chapter XXIII.—Pastoral Production.

31. **Breweries.**—(i) *Details of Industry.* The following table gives particulars of breweries in each State for the year 1956-57 and for Australia for a series of years. It should be noted, however, that the data shown are not strictly comparable throughout, owing to the inability or failure of some breweries to furnish a separate return for each branch of activity. Consequently the figures for some States include details of employment, wages, output, etc., not connected with the brewing of beer, although associated with it. These extraneous activities include cooperage, malt works, aerated waters, etc.

#### BREWERIES.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	7	6	6	3	3	2	27
Number of persons employed ..	1,943	1,993	866	(a)	(a)	(a)	6,107
Salaries and wages paid .. £'000	2,041	2,081	767	(a)	(a)	(a)	6,196
Value of power, fuel, etc., used £'000	601	356	215	(a)	(a)	(a)	1,509
Value of materials used .. £'000	8,273	6,883	2,130	(a)	(a)	(a)	21,238
Value of production .. £'000	5,999	4,079	2,295	(a)	(a)	(a)	16,266
Total value of output (b) .. £'000	14,873	11,318	4,640	(a)	(a)	(a)	39,013
Value of land and buildings £'000	3,317	2,869	2,837	(a)	(a)	(a)	11,069
Value of plant and machinery £'000	5,216	3,952	2,214	(a)	(a)	(a)	14,863
Horse-power of engines ordinarily in use .. .. h.p.	16,533	11,721	7,991	(a)	(a)	(a)	45,268

(a) Not available for publication; figures are included in the total for Australia.

(b) Excludes Excise Duty.

BREWERIES—*continued.*

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	34	32	31	30	28	27
Number of persons employed .. ..	3,698	5,904	6,193	6,791	6,835	6,107
Salaries and wages paid .. .. £'000	1,215	5,030	5,325	6,272	6,588	6,196
Value of power, fuel, etc., used .. .. £'000	251	1,388	1,366	1,369	1,396	1,509
Value of materials used .. .. £'000	3,407	16,452	19,975	20,810	22,437	21,238
Value of production .. .. £'000	5,372	11,458	13,048	14,855	15,224	16,266
Total value of output(a) .. .. £'000	9,030	29,298	34,389	37,034	39,057	39,013
Value of land and buildings .. .. £'000	2,801	6,480	7,256	8,307	10,099	11,069
Value of plant and machinery .. .. £'000	2,737	5,870	7,681	10,295	12,917	14,863
Horse-power of engines ordinarily in use .. .. h.p.	23,231	32,754	38,803	42,359	44,908	45,268

(a) Excludes Excise Duty.

(ii) *Production, Consumption, Materials Used.* The quantity of ale, beer and stout brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32, but thereafter increased each year to 109.2 million gallons in 1941-42. Under the Control of Liquor Order which operated between March, 1942 and March, 1946, the production of beer was restricted and consequently annual output remained static at about 100 million gallons from 1942-43 to 1944-45. Thereafter production increased, and in 1957-58 amounted to over 233 million gallons.

The average annual consumption of ale, beer and stout prior to the economic depression of the early thirties exceeded 11 gallons per head of the population: it dropped to 7.3 gallons in 1931-32, increased to 13.8 gallons in 1941-42 and declined again to about 13 gallons during the period of control. The consumption per head had increased to 23.0 gallons by 1957-58.

The table below shows the quantities of materials used and the quantity and value of ale, beer (excluding waste beer) and stout brewed in each State during 1956-57:—

## BREWERIES : MATERIALS USED AND PRODUCTION, 1956-57.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MATERIALS USED.							
Malt .. .. '000 bus.	2,509	2,018	773	(a)	(a)	(a)	6,551
Hops .. .. '000 lb.	1,988	1,142	525	(a)	(a)	(a)	4,508
Sugar .. .. ton	21,135	14,225	4,654	(a)	(a)	(a)	46,215

## ALE, BEER AND STOUT BREWED (EXCLUDING WASTE BEER).

Quantity .. '000 gals.	91,930	65,172	24,134	(a)	(a)	(a)	220,727
Value (b) .. .. £'000	14,700	11,177	4,607	(a)	(a)	(a)	38,454

(a) Not available for publication; figures are included in the total for Australia. (b) Excludes Excise Duty.

32. *Wineries and Distilleries.*—The following table shows particulars of the operations of Wineries and Distilleries for each State during 1956-57 and for Australia for a series of years.

## WINERIES AND DISTILLERIES.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	29	28	5	73	22	..	157
Number of persons employed .. ..	225	373	166	1,191	72	..	2,027
Salaries and wages paid .. .. £'000	212	322	152	975	38	..	1,699
Value of power, fuel, etc., used .. .. £'000	118	103	70	129	3	..	423
Value of materials used .. .. £'000	1,168	916	384	3,833	160	..	6,461
Value of production .. .. £'000	612	839	301	1,830	122	..	3,704
Total value of output .. .. £'000	1,898	1,858	755	5,792	285	..	10,588
Value of land and buildings .. .. £'000	447	349	118	1,378	71	..	2,363
Value of plant and machinery .. .. £'000	466	340	391	1,085	66	..	2,348
Horse-power of engines ordinarily in use .. .. h.p.	1,372	2,518	590	6,591	341	..	11,412

WINERIES AND DISTILLERIES—*continued.*

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	135	167	164	158	155	157
Number of persons employed .. ..	1,133	2,021	1,981	2,022	1,908	2,027
Salaries and wages paid .. .. £'000	246	1,431	1,475	1,506	1,532	1,699
Value of power, fuel, etc., used .. .. £'000	58	333	365	387	368	423
Value of materials used .. .. £'000	1,421	5,464	5,721	4,885	5,074	6,461
Value of production .. .. £'000	811	3,198	3,254	2,846	2,890	3,704
Total value of output .. .. £'000	2,290	8,995	9,340	8,118	8,332	10,588
Value of land and buildings .. .. £'000	1,002	2,104	2,284	2,312	2,254	2,363
Value of plant and machinery .. .. £'000	916	1,913	2,108	2,170	2,099	2,348
Horse-power of engines ordinarily in use .. .. h.p.	4,396	10,995	11,275	11,054	11,159	11,412

33. **Tobacco, Cigars and Cigarettes.**—Particulars of establishments in which the manufacture of tobacco, cigars or cigarettes was carried on during 1956-57 are shown below for each State and for Australia for a series of years. There are no such factories in South Australia or Tasmania.

## TOBACCO, CIGARS AND CIGARETTES.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	W. Aust.	Aust.
Number of factories .. ..	12	10	5	2	29
Number of persons employed .. ..	2,574	1,962	(a)	(a)	4,630
Salaries and wages paid .. .. £'000	2,278	1,706	(a)	(a)	4,038
Value of power, fuel, etc., used .. .. £'000	76	47	(a)	(a)	127
Value of materials used .. .. £'000	20,411	13,001	(a)	(a)	33,535
Value of production .. .. £'000	6,026	4,923	(a)	(a)	10,999
Total value of output(b) .. .. £'000	26,513	17,971	(a)	(a)	44,661
Value of land and buildings .. .. £'000	641	904	(a)	(a)	1,764
Value of plant and machinery .. .. £'000	1,429	1,426	(a)	(a)	3,059
Horse-power of engines ordinarily in use .. .. h.p.	7,556	3,003	(a)	(a)	10,990

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	30	37	36	34	33	29
Number of persons employed .. ..	5,544	4,704	4,757	4,707	4,622	4,630
Salaries and wages paid .. .. £'000	1,096	3,204	3,417	3,516	3,728	4,038
Value of power, fuel, etc., used .. .. £'000	34	144	151	158	128	127
Value of materials used .. .. £'000	7,081	22,416	26,835	28,825	31,227	33,535
Value of production .. .. £'000	2,685	7,078	8,341	9,745	9,244	10,999
Total value of output(b) .. .. £'000	9,800	29,638	35,327	38,728	40,599	44,661
Value of land and buildings .. .. £'000	1,042	1,741	1,822	1,504	1,867	1,764
Value of plant and machinery .. .. £'000	943	1,458	1,917	2,190	2,784	3,059
Horse-power of engines ordinarily in use .. .. h.p.	4,610	6,028	6,919	8,466	10,778	10,990
Leaf used—						
Australian (stemmed) .. .. '000 lb.	4,489	4,222	4,866	4,482	5,204	5,299
Imported (stemmed) .. .. '000 lb.	16,011	28,410	33,076	36,053	37,399	40,860
Tobacco made .. .. '000 lb.	16,305	22,334	23,400	21,466	18,836	18,917
Cigars made .. .. '000 lb.	238	129	143	151	132	114
Cigarettes made .. .. '000 lb.	6,731	13,879	18,303	22,859	27,162	30,513

(a) Not available for publication; figures are included in the total for Australia. (b) Excludes Excise Duty.

For many years the production of locally-grown leaf was comparatively small, and manufacturers were dependent on imported leaf for the supply of their raw materials. Increased import duties stimulated local production, and the quantity of Australian leaf used by manufacturers rose from 1.2 million lb. in 1929-30 to over 3 million lb. in 1930-31. During the 1939-45 War, about 4.7 million lb. of Australian-grown leaf was used annually, and the 1956-57 usage was 5.3 million lb. For further information see Chapter XXII.—Agricultural Production.

Imports of tobacco during 1956-57 comprised—manufactured tobacco, 236,314 lb.; cigars, 49,911 lb.; cigarettes, 464,046 lb.; unmanufactured tobacco, 40,765,547 lb. and in 1957-58 were 402,388 lb., 86,165 lb., 370,842 lb. and 43,029,219 lb. respectively.

34. Sawmills, etc.—The most important industry in Class X. is sawmilling. Because of difficulties associated with the classifying of sawmills into forest and town mills, they have been combined in the following table, together with plywood and veneer mills.

## SAWMILLS AND PLYWOOD AND VENEER MILLS.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	1,094	578	626	95	262	345	3,000
Number of persons employed ..	10,774	7,381	8,590	2,238	4,297	2,555	35,835
Salaries and wages paid .. £'000	8,362	6,117	6,123	1,836	3,167	1,958	27,563
Value of power, fuel, etc., used .. £'000	683	460	367	84	277	185	2,056
Value of materials used .. .. £'000	24,031	14,132	12,327	6,584	5,449	4,294	66,817
Value of production .. .. £'000	15,118	10,228	10,188	3,342	5,716	3,336	47,928
Total value of output .. .. £'000	39,832	24,820	22,882	10,010	11,442	7,815	116,801
Value of land and buildings .. £'000	4,431	2,843	1,744	1,355	970	736	12,079
Value of plant and machinery .. £'000	4,867	3,520	3,276	1,390	2,044	1,989	17,086
Horse-power of engines ordinarily in use .. .. h.p.	116,865	83,628	82,828	21,751	40,123	33,707	378,902

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	1,639	3,245	3,117	3,033	3,025	3,000
Number of persons employed ..	19,056	34,541	35,448	36,631	37,102	35,835
Salaries and wages paid .. £'000	3,626	21,367	23,536	25,530	27,086	27,563
Value of power, fuel, etc., used .. £'000	225	1,547	1,639	1,805	1,938	2,056
Value of materials used .. .. £'000	8,441	46,585	53,908	61,073	65,618	66,817
Value of production .. .. £'000	5,762	35,663	39,799	45,319	47,042	47,928
Total value of output .. .. £'000	14,428	83,795	95,346	108,197	114,598	116,801
Value of land and buildings .. £'000	2,029	8,043	8,775	10,321	11,136	12,079
Value of plant and machinery .. £'000	2,777	11,906	12,504	14,896	16,201	17,086
Horse-power of engines ordinarily in use .. .. h.p.	89,843	332,736	336,951	359,786	371,003	378,902

The sawmill output of native timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the depth of the depression, recovered to 717 million super. feet in 1938-39 and by 1957-58 had risen to 1,400 million super. feet. Further reference is made to the sawmilling industry in Chapter XXV.—Forestry.

35. Cabinet and Furniture Making and Upholstery.—These industries constitute the principal manufactures in Class XI. The following table shows particulars for each State in 1956-57 :—

## CABINET AND FURNITURE MAKING AND UPHOLSTERY, 1956-57.

Items	N.S.W.	Vic.	Q'land.	S Aust	W. Aust.	Tas.	Aust.
Number of factories .. ..	539	532	235	118	151	60	1,635
Number of persons employed ..	5,302	4,629	2,269	1,526	1,025	413	15,164
Salaries and wages paid .. £'000	4,347	3,427	1,439	1,091	624	265	11,193
Value of power, fuel, etc., used .. £'000	117	84	35	28	19	6	289
Value of materials used .. .. £'000	7,160	5,131	2,469	1,742	1,103	321	17,926
Value of production .. .. £'000	7,024	5,713	2,229	1,637	1,010	446	18,059
Total value of output .. .. £'000	14,301	10,928	4,733	3,407	2,132	773	36,274
Value of land and buildings .. £'000	2,858	2,558	1,022	571	574	176	7,759
Value of plant and machinery .. £'000	798	790	332	270	180	54	2,424
Horse-power of engines ordinarily in use .. .. h.p.	13,997	13,983	7,346	5,092	3,310	1,368	45,096

36. Printing Works.—Printing and bookbinding rank high in importance among the industries of Australia, and in 1956-57 afforded employment for 39,911 employees, and paid £34,766,000 in salaries and wages, while the value of output amounted to £112,629,000. The first table below gives particulars of establishments engaged in general printing in each

State for 1956-57. These establishments include those engaged in lithographic printing, bookbinding, paper ruling and linotyping and Government printing works. Establishments producing newspapers and periodicals are shown separately in the second table following:—

GOVERNMENT AND GENERAL PRINTING WORKS, 1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	564	540	111	85	76	23	1,399
Number of persons employed ..	10,203	9,110	2,323	1,649	1,402	584	25,271
Salaries and wages paid .. £'000	8,762	7,620	1,605	1,233	953	459	20,632
Value of power, fuel, etc., used £'000	286	222	42	31	30	10	621
Value of materials used .. £'000	12,814	9,763	1,705	1,343	1,142	435	27,202
Value of production .. £'000	14,864	13,111	2,697	1,899	1,868	697	35,136
Total value of output .. £'000	27,964	23,096	4,444	3,273	3,040	1,142	62,959
Value of land and buildings £'000	5,425	5,332	905	726	640	282	13,310
Value of plant and machinery £'000	5,733	5,920	951	962	741	279	14,586
Horse-power of engines ordinarily in use .. .. h.p.	15,671	13,717	2,429	2,098	2,019	850	36,784

NEWSPAPERS AND PERIODICALS, 1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	178	111	59	36	23	5	412
Number of persons employed ..	6,777	3,348	2,195	1,195	740	385	14,640
Salaries and wages paid .. £'000	6,700	3,299	1,879	1,117	738	401	13,134
Value of power, fuel, etc., used £'000	280	119	71	35	38	8	551
Value of materials used .. £'000	10,276	7,563	2,726	1,851	1,261	332	24,009
Value of production .. £'000	11,723	5,727	3,470	2,086	1,533	551	25,110
Total value of output .. £'000	22,279	13,409	6,267	3,972	2,852	891	49,670
Value of land and buildings £'000	6,288	1,616	1,298	830	509	222	10,763
Value of plant and machinery £'000	5,612	2,795	1,416	667	706	119	11,315
Horse-power of engines ordinarily in use .. .. h.p.	14,252	10,479	5,482	3,539	2,536	692	36,980

37. **Paper Making.**—Although the paper manufacturing industry has been established in Australia for many years, it was not until the manufacture of paper pulp from indigenous timber commenced in 1938-39 that any marked development occurred.

Plants producing pulp from eucalypt timber are operating in Victoria and Tasmania, whilst in South Australia pulp is being produced from locally-grown softwoods. The production of pulp rose from 6,000 tons in 1938-39 to 88,000 tons in 1946-47. It remained at about this level until 1949-50 but has since increased steadily to a total of nearly 195,000 tons in 1956-57.

The number of factories operating in 1956-57 comprised four in New South Wales, seven in Victoria, one each in Queensland, South Australia, and Western Australia and three in Tasmania. In Tasmania, newsprint, writing and printing papers are produced, and in the other States wrappings, other papers and boards. Particulars for this industry are shown in the following table.

PAPER MAKING, INCLUDING PULP MILLS: AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56. (a)	1956-57. (a)
Number of factories .. ..	7	17	18	20	17	17
Number of persons employed ..	1,961	6,441	7,179	7,611	7,480	7,903
Salaries and wages paid .. £'000	467	5,338	6,130	7,095	7,813	8,783
Value of power, fuel, etc., used £'000	201	1,649	2,048	2,560	2,735	2,996
Value of materials used .. £'000	1,096	12,637	15,198	17,474	18,963	22,419
Value of production .. £'000	1,005	11,085	15,451	18,294	17,330	19,383
Total value of output .. £'000	2,302	25,371	32,697	38,328	39,028	44,798
Value of land and buildings £'000	850	7,324	8,106	8,255	9,312	9,527
Value of plant and machinery £'000	1,713	15,263	16,810	18,050	18,640	18,141
Horse-power of engines ordinarily in use .. .. h.p.	31,548	127,558	141,373	157,948	164,123	170,382

(a) Excludes several establishments previously included, engaged in processing but not manufacturing paper.

38. **Rubber Goods.**—The following table shows particulars of this industry for each State during 1956-57 but excludes establishments engaged primarily in the retreading and repairing of tyres.

## RUBBER GOODS, 1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	43	54	12	8	2	1	120
Number of persons employed ..	6,769	6,182	1,152	718	(a)	(a)	14,859
Salaries and wages paid .. £'000	6,695	5,982	909	688	(a)	(a)	14,296
Value of power, fuel, etc., used .. ..	£'000 920	901	109	74	(a)	(a)	2,007
Value of materials used .. ..	£'000 16,628	14,088	2,765	859	(a)	(a)	34,378
Value of production .. ..	£'000 8,844	11,327	1,974	1,065	(a)	(a)	23,246
Total value of output .. ..	£'000 26,392	26,316	4,848	1,997	(a)	(a)	59,631
Value of land and buildings ..	£'000 2,373	3,211	459	179	(a)	(a)	6,292
Value of plant and machinery .. ..	£'000 2,398	3,757	292	182	(a)	(a)	6,645
Horse-power of engines ordinarily in use .. ..	h.p. 50,536	53,254	7,608	2,994	(a)	(a)	114,562

(a) Not available for publication ; figures are included in the total for Australia.

39. **Electric Light and Power Works.**—(i) *Details of Industry.* The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. For further information on this subject see Chapter VII.—Electric Power Generation and Distribution. Particulars of the industry for each State during the year 1956-57 and for Australia for a series of years are shown below :—

**ELECTRIC LIGHT AND POWER WORKS.**  
1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	82	53	56	41	87	9	328
Number of persons employed ..	5,490	3,186	1,540	(a)	971	(a)	12,473
Salaries and wages paid .. £'000	6,108	3,534	1,493	(a)	1,052	(a)	13,571
Value of power, fuel, etc., used .. ..	£'000 16,208	10,512	5,876	(a)	3,438	(a)	39,830
Value of materials used .. ..	£'000 2,070	605	994	(a)	292	(a)	4,396
Value of production .. ..	£'000 23,570	13,825	4,129	(a)	2,916	(a)	50,722
Total value of output .. ..	£'000 41,848	24,942	10,999	(a)	6,646	(a)	94,948
Value of land and buildings ..	£'000 34,903	15,115	8,427	(a)	2,663	(a)	102,318
Value of plant and machinery .. ..	£'000 68,397	57,017	25,160	(a)	14,822	(a)	198,269
Generators installed — Kilowatt capacity .. ..	'000 kW 1,866	1,163	530	(a)	295	(a)	4,705

AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of factories .. ..	395	349	351	351	332	328
Number of persons employed ..	6,508	10,891	11,395	11,927	12,111	12,473
Salaries and wages paid .. £'000	1,977	9,675	10,308	11,457	12,497	13,571
Value of power, fuel, etc., used ..	£'000 3,239	32,205	35,083	36,548	37,479	39,830
Value of materials used .. ..	£'000 530	3,296	4,800	4,170	4,090	4,396
Value of production .. ..	£'000 8,714	24,582	30,098	37,568	43,219	50,722
Total value of output .. ..	£'000 12,483	60,083	69,981	78,286	84,788	94,948
Value of land and buildings ..	£'000 8,388	29,531	47,369	60,120	73,688	102,318
Value of plant and machinery ..	£'000 27,751	94,169	122,773	146,273	158,377	198,269

(a) Not available for publication ; figures are included in the total for Australia.

Particulars of the types of engines and generators installed in Electric Light and Power Works and their rated horse-power are given on page 159.

(ii) *Production.* The increase in the production of electric light and power in each of the States since 1938-39 is shown in the following table :—

**ELECTRIC LIGHT AND POWER WORKS : ELECTRICITY PRODUCED.**  
(Million kWh.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 .. ..	1,948	1,223	387	256	307	567	4,688
1951-52 .. ..	4,628	2,964	1,242	788	530	1,145	11,297
1952-53 .. ..	4,868	3,193	1,349	822	569	1,244	12,045
1953-54 .. ..	5,450	3,693	1,511	955	627	1,471	13,707
1954-55 .. ..	5,951	4,152	1,658	1,119	703	1,589	15,172
1955-56 .. ..	6,505	4,633	1,786	1,204	753	1,794	16,675
1956-57 .. ..	7,008	5,037	1,937	1,315	782	2,210	18,289
1957-58(a) .. ..	7,565	5,250	2,221	1,593	828	2,336	19,793

(a) Preliminary—subject to revision.

40. Gas-works.—(i) *Details of Industry.* Gas-works are in operation in the majority of important towns in Australia. The following table shows particulars of gas-works in each State for the year 1956-57 and for Australia for a series of years :—

## GAS-WORKS.

1956-57.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. .. .	37	32	16	3	4	2	94
Number of persons employed ..	1,441	1,629	392	(a)	175	(a)	4,138
Salaries and wages paid .. £'000	1,630	1,833	329	(a)	158	(a)	4,448
Value of power, fuel, etc., used .. £'000	2,111	195	39	(a)	175	(a)	2,591
Value of materials used .. £'000	6,453	5,790	1,054	(a)	566	(a)	15,598
Value of production .. £'000	5,250	2,793	857	(a)	274	(a)	9,894
Total value of output .. £'000	13,814	8,778	1,950	(a)	1,015	(a)	28,083
Value of land and buildings .. £'000	1,408	3,009	351	(a)	151	(a)	5,189
Value of plant and machinery .. £'000	6,523	14,142	1,951	(a)	1,634	(a)	27,667
Horse-power of engines ordinarily in use .. .. . h.p.	19,193	15,816	2,443	(a)	1,185	(a)	44,373

## AUSTRALIA.

Items.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56	1956-57.
Number of factories .. .. .	107	99	98	97	95	94
Number of persons employed ..	2,931	4,199	4,141	4,103	4,087	4,138
Salaries and wages paid .. £'000	785	3,553	3,767	3,882	4,148	4,448
Value of power, fuel, light, etc., used .. £'000	251	2,080	2,244	2,291	2,297	2,591
Value of materials used .. £'000	1,872	15,576	15,249	15,187	15,350	15,598
Value of production .. £'000	2,694	8,473	8,121	9,103	9,272	9,894
Total value of output .. £'000	4,817	26,129	25,614	26,581	26,919	28,083
Value of land and buildings .. £'000	1,463	2,342	2,416	2,488	2,748	5,189
Value of plant and machinery .. £'000	7,498	15,962	17,235	19,134	19,828	27,667
Horse-power of engines ordinarily in use .. .. . h.p.	17,905	29,514	30,055	33,389	42,082	44,373

(a) Not available for publication ; figures are included in the total for Australia.

(ii) *Coal Used and Production.* The following table shows details for 1956-57 :—

## GAS-WORKS : COAL USED AND PRODUCTION, 1956-57.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal used '000 tons .. .. .	912	603	203	(a)	42	(a)	1,946
Gas produced million cu. ft.	22,583	15,746	3,115	(a)	1,451	(a)	46,653
Gas sold .. .. .	19,917	13,495	2,707	(a)	1,246	(a)	40,662
Coke produced (b) '000 tons	456	207	94	(a)	25	(a)	893

(a) Not available for publication ; figures are included in the total for Australia. (b) In addition 2,234,458 tons of metallurgical coke were made in Coke Works in 1956-57.

Since 1938-39, when the output of gas was 21 thousand million cubic feet, production has increased each year and reached nearly 48 thousand million cubic feet in 1957-58.

## CHAPTER VII.

## ELECTRIC POWER GENERATION AND DISTRIBUTION.

This chapter is divided into three major parts. A.—Introduction, which deals briefly with the resources, generation and distribution, and future development of electric power in Australia ; B.—The Snowy Mountains Hydro-electric Scheme ; and C.—The origins, development, present situation and new projects of electrical systems in each Australian State and Territory. A Statistical Summary is appended.

It should be noted that the information contained in the chapter relates to situations existing and projects contemplated in 1958 and that it may be considerably affected by changes in policy or plans, or by developments in the projects themselves.

## A. INTRODUCTION.

1. *Distribution of Population and Location of Power Resources.*—The geographical pattern of electric power generation and distribution in Australia has been affected by two main influences—the distribution of population, with a resulting distribution of industry, and the location of fuel and water resources.

The Australian population increased between 1939 and 1958 by approximately 2,878,000 to reach a total of 9,846,000. The two principal centres of population and industry, the metropolitan areas of Sydney and Melbourne, make the greatest demands for electric power and their growth has been associated with the development of large deposits of coal located relatively close to the source of demand. This, together with the fact that the major water resources are also located in the south-eastern portion of the Commonwealth, materially influences the distribution of industrial population and the location of major electric power stations.

*By far the most important source of energy used in the production of electric power in Australia is coal. At 30th June, 1957, thermal power equipment represented 76 per cent., hydro plant 19 per cent. and internal combustion equipment 5 per cent. of the total installed generating capacity.*

Most of Australia is poorly supplied with water, only about 15 per cent. receiving an annual rainfall of 30 inches or over. This is confined largely to Tasmania and to the narrow coastal strip along the east coast. The possibility of establishing large hydro or steam stations in inland areas is, therefore, strictly limited by the lack of sufficient water for feed and condensing purposes.

The only region on the mainland of Australia where land is high enough to receive reliable winter snowfall, and from which, therefore, reasonably constant water supplies throughout the year can be expected, is the mountain chain which stretches from the high plateaux of south-eastern New South Wales through to the north-eastern highlands of Victoria. The hydro-electric potential of this area is considerable, and plans have been formulated to develop more than 3,000,000 kW within the next 25 years. The two major construction projects in this area are the Snowy Mountains and Kiewa schemes. Other hydro-electric potential does exist on the mainland on the rivers of the coastal areas of New South Wales and Queensland, but the amount there available is only a small proportion of the potential of the Alpine region. In Tasmania, hydro-electric resources have been estimated at about 50 per cent. of the total Australian hydro-electric potential. Whereas on the mainland the chief source of energy is coal, water occupies this position in Tasmania.

2. *Electric Power Generation and Distribution.*—(i) *Ownership of Undertakings.* At the beginning of this century, Australia's electrical undertakings were carried on mainly by private enterprise, but some measure of governmental control was exercised through various electric light and power Acts. This legislation was designed to provide standards of safety, and to define the scope and obligations of the private organizations engaged in producing electric power for sale. A trend towards public ownership commenced during the 1914–18 War and became more pronounced after the 1939–45 War. By 1958, all major generating stations supplying the public were, in varying degrees, under the control of State statutory organizations constituted with the object of unifying and co-ordinating the generation and distribution of electricity supplies within the various States. There are, however, still a large number of small private and municipal enterprises generating power

for supply to country towns, although central authorities are extending supply to these places wherever practicable. In many areas, however, it has been and remains the practice for central authorities to sell power in bulk to local distributing organizations which undertake reticulation.

In addition to the private, local government and statutory organizations which generate and/or distribute electricity for sale, there are numerous firms generating power for use in their own establishments, particularly those engaged in mining pursuits remote from the main centres of population. This chapter, however, is concerned mainly with the activities of central electric stations, and the power regularly produced for such internal consumption is, in any case, a relatively small proportion of the total power produced.

(ii) *Power Production and Generating Capacity.* In the period between 1938-39 and 1957-58, production of electric power in Australia increased by over 320 per cent. from 4,688 to 19,799 million kilowatt hours.

Since the 1939-45 War, industry and commerce have expanded rapidly, many new houses have been built and the population has increased by approximately 20 per cent. These factors, together with the extension of electricity supplies to rural areas and the increased use of domestic electric appliances, have all contributed to bring about a position where the greatly increased demand for power cannot be satisfied by the existing installed capacity of central generating stations.

At 30th June, 1957, installed generating capacity in Australia totalled approximately 4.71 million kW compared with 1.62 million kW in 1939, an increase of 190 per cent. In 1956-57, each kW of installed capacity produced an average of 3,887 kWh compared with an average of 3,000 kWh in 1938-39. These figures are based on Commonwealth totals; figures for the States vary, depending on such factors as the distribution of demand, number of consumers, and type of equipment employed.

3. *Future Developments.*—Each central authority has embarked upon a constructional programme to overcome the lag between supply and demand. Industrial and commercial expansion, however, has continued on a high level, and several projects have been commenced or planned in various parts of the Commonwealth for suburban and main line railway electrification. Other fields directly connected with the demand for power, such as house building, must also be taken into account.

An important factor to be considered in respect of future development is the increasing relative importance of the generation of electric power from water resources.

## B. SNOWY MOUNTAINS HYDRO-ELECTRIC SCHEME.\*

1. *Geography of Area.*—The Snowy country in south-eastern New South Wales is the only part of the continent in which altitudes exceed 7,000 feet, and in which there is a substantial area over the altitude of 6,000 feet. The precipitation which results from the presence of this barrier on the line of the prevailing winter depressions of Antarctic origin amounts to as much as 120 inches a year in the vicinity of Mt. Kosciusko, the highest point in Australia. The drainage from the snowfields is practically all to three systems—those of the Murray and Murrumbidgee Rivers, which flow inland, and that of the Snowy, which flows southwards to Bass Strait.

2. *Description of Scheme.*—(i) *General.* The proposals at present being implemented by the Snowy Mountains Hydro-electric Authority fall into two groups, Tumut Development and Snowy-Murray Development, each having its associated plans for hydro-electric power production. The features described hereunder may be identified by reference to the map on page 221. It should be remembered that, as the final designs for a number of elements of the Scheme have not yet been completed, and in many cases will not be completed for some years, any figures which are now quoted in respect of those elements will undoubtedly be subject to modification in the future.

(ii) *Tumut Development.* The central feature of this part of the Scheme is diversion to, and regulation of, the waters of the Tumut River, a stream which is at present completely unregulated but contributes approximately half of the flow of the Murrumbidgee River at Gundagai below the existing main storage on the Murrumbidgee at Burrinjuck. To the Tumut will be diverted the waters of the Eucumbene, a major tributary of the Snowy, and the headwaters of the Tooma, a tributary of the Upper Murray. The headwaters of the Murrumbidgee itself will also be diverted to the Tumut, principally to secure desirable electric power.

\* See also Chapter VIII.—Water Conservation and Irrigation, Division A, §3, para. 4 of this issue and special detailed article in Official Year Book No. 42, pp. 1103-1130.

A major dam has been constructed on the Eucumbene River at Adaminaby, to create an ultimate usable storage of 3.5 million acre feet, and from here water will be conveyed by a 14-mile tunnel to Tumut Pond, on the upper reaches of the Tumut River, where it will be joined by the waters from the Tooma, diverted by aqueducts and tunnels. From Tumut Pond, the water will be conveyed by another tunnel to power station T1 with an installed capacity of 320,000 kW and by a further tunnel to power station T2 with a capacity of 280,000 kW thence discharging into a smaller storage at Lob's Hole also on the Tumut River.

Between the foot of the Lob's Hole storage and the top of the Blowering storage will be power stations T5 and T6. The total capacity of these stations will be 410,000 kW.

The Blowering storage with its capacity of about 800,000 acre feet, is an adjunct to the Snowy Mountains Hydro-electric Scheme and will be required for the regulation both of the Tumut waters and of the waters diverted into the Tumut. This regulation is essential if the waters impounded are to be fully utilized for irrigation purposes. At the foot of the Blowering Dam will be the last of the Tumut Power stations, T7, with a capacity of some 60,000 kW, but this station will operate only when water is released for irrigation. The State of New South Wales will be responsible for the construction of the Blowering works.

The waters of the Upper Murrumbidgee will be brought from a major storage at Tantangara holding 200,000 acre feet, through 10½ miles of tunnel, to the Adaminaby storage and will augment the flow through power stations T1, T2, T5, T6, and T7 on the Tumut River.

The total extra new water which will reach the Murrumbidgee is expected to average 528,000 acre feet per annum.

(iii) *Snowy-Murray Development.* Investigation of this section of the Scheme is not as far advanced as that for the Tumut Development and considerable modifications may be made to the lay-out proposed by the Commonwealth and States Snowy River Committee. In the original lay-out the central feature of this part of the Scheme is the diversion of the waters of the Upper Snowy itself from a major dam to be constructed at Jindabyne on that river, a little below its junction with the Eucumbene and the Crackenback Rivers. This reservoir will have a storage capacity of approximately 1,100,000 acre feet and from it a tunnel approximately 28 miles in length will run right through the Great Dividing Range finally discharging into Swampy Plain River, not far above its junction with the Murray proper.

Into this tunnel will be collected a considerable quantity of water from the very high altitude country of the Kosciusko area and from a number of smaller tributaries of the Murray. The collection from the Kosciusko area commences at the Kosciusko Reservoir at an altitude of 5,765 feet, not many miles below the source of the Snowy. A tunnel will convey water from this reservoir to power station M.1.A. with an installed capacity of 60,000 kW and thence to a pond on the Snowy River, at its junction with the Guthega River.

From the Guthega Pond, a further tunnel and penstock lead to station M.1.B. with a capacity of 60,000 kW (ultimate capacity 90,000 kW), which discharges into a pond at the junction of the Munyang and Snowy Rivers. This part of the scheme came into operation in February, 1955. Munyang Pond discharges into a tunnel leading to station M.2.L., with installed capacity of 60,000 kW. This station also receives the flow of a tributary of the Snowy River via station M.2.H. From station M.2.L., the water discharges into a reservoir at Island Bend on the main stream of the Snowy.

From the Island Bend reservoir, a vertical shaft, 1,100 feet deep, will lead to the main tunnel from Jindabyne reservoir previously referred to, passing on its way through power station M3 with installed capacity of 265,000 kW. Into this main tunnel will also be collected waters from the Upper Murray tributary streams previously mentioned.

Of these, the most important is the Windy Creek-Geehi River series. A pond on Windy Creek, a small tributary of the Geehi, situated at an altitude of over 5,000 feet, will provide water through a tunnel to station M4 with an installed capacity of 75,000 kW thence by aqueducts and tunnel to station M5.H. with an installed capacity of 40,000 kW discharging into the M5.L. intake pond on the Geehi River.

A vertical shaft will lead this water into the main tunnel, passing through station M5.L. with an installed capacity of 20,000 kW. The combined waters thus collected into the main tunnel will pass through station M6 with an installed capacity of 540,000 kW and then discharge into a pond on Bogong Creek, another of the Upper Murray tributaries. At this point, the water will still be at an altitude of nearly 2,000 feet, and the main tunnel will thence continue to station M7 with a capacity of 540,000 kW.

From M7 the total collected waters will flow into the Swampy Plain River at a point some seven miles, in a direct line, above its confluence with the Murray.

The total water flowing to the Murray from these works will amount on the average to 722,000 acre feet per annum, but since 280,000 acre feet which now reach the Murray from the Tooma will be diverted to the Tumut, as indicated previously, the total extra-water actually reaching the Murray will be, on the average, 442,000 acre feet per annum. This additional water will be regulated for irrigation purposes either in Hume reservoir which is now being enlarged to 2,500,000 acre feet capacity by the River Murray Commission, or in a new storage on the Upper Murray.

An integral part of each development is the construction of hundreds of miles of aqueducts to collect and divert water from the many streams in the area into storages and tunnels.

**3. Utilization of Power.**—The total capacity of all stations in the Scheme will be of the order of 3,000,000 kW. By comparison, the present total installed capacity of all the generating stations in the Commonwealth is over 4,700,000 kW.

If, however, the demand for power continues to increase as expected, the major source of power must still be thermal stations. The operation of the whole Scheme is dependent on the appropriate development and integration of these stations, as otherwise there would be a serious loss in ultimate economy. All economic estimates therefore postulate that thermal capacity will be expanded so as to preserve an appropriate ratio.

It has been estimated with a reasonable degree of probability that the power available from the Scheme will save approximately five million tons of coal annually.

The first call on the power generated under the Snowy Scheme will be by the Commonwealth Government for supply to the Australian Capital Territory of power which it needs in that area, particularly for certain projects with defence significance, and no indication can be given at present as to how great that call will be. It is not likely, however, to amount to more than a relatively small fraction of the total power available, and it has been agreed that the balance will be divided between the States of New South Wales and Victoria in a proportion of two-thirds to New South Wales and one-third to Victoria.

The first power station in the scheme, M.1.B., the Guthega Project, is now producing power. A 132 kV transmission line extends from the power station via Cooma to the Australian Capital Territory where it feeds into the main New South Wales transmission network. The construction of the Adaminaby Dam embankment supervised by the Public Works Department of New South Wales on behalf of the Snowy Mountains Authority has been completed and, due to early closure of the diversion tunnel gates, a full year's flow of the Eucumbene River has already been stored in the reservoir, now called Lake Eucumbene. Excavation of the Eucumbene-Tumut tunnel has been completed and the placing of a concrete lining is now in progress. Tumut Pond Dam is nearing completion as is power station T.1 which should come into service in the early part of 1959. Three hundred and thirty thousand volt transmission lines are being constructed to join this station to both the New South Wales and the Victorian power systems. Contracts for the Tooma-Tumut Diversion, the Murrumbidgee-Eucumbene Diversion and the T.2 Power Station, totalling more than £33,000,000 have been let and work has already commenced on these projects.

## C. STATES AND TERRITORIES.

### § 1. New South Wales.

**1. General.**—In Official Year Book No. 39, an account was given, in some detail, of the origin and development of electricity generation and distribution in New South Wales, describing in particular the growth of the systems of the Sydney County Council, the Department of Railways, the Electric Light and Power Supply Corporation Ltd., the Southern Electricity Supply and the Clarence River County Council (now the Northern Rivers County Council). A description was also given of the legislation which constituted The Electricity Authority of New South Wales and The Electricity Commission of New South Wales as well as legislation existing prior to their constitution. At present, the three main Acts governing electricity supply in New South Wales are:—

- (i) The Local Government Act 1919 which lays down the various rights and responsibilities of local government bodies in the establishment and operation of electricity trading undertakings.
- (ii) The Electricity Development Act 1945-1957 which established the Electricity Authority of New South Wales as the body responsible for the co-ordination of electricity supply throughout the State.

- (iii) The Electricity Commission Act 1950-1954 which constituted The Electricity Commission of New South Wales as the major generating authority and not subject to the provisions of the Electricity Development Act.

**2. Organization.**—(i) *The Electricity Commission of New South Wales.*—The Commission, which was constituted under the Electricity Commission Act 1950-1954 consists of five members of whom one is a full-time Chairman. In its administration, the Commission is directly responsible to the Minister for Local Government.

When the Commission was established, 93 per cent. of the State's power requirements were generated by four bodies—the Sydney County Council, the Department of Railways, the Southern Electricity Supply (a division of the Department of Public Works) and the privately-owned Electric Light and Power Supply Corporation Ltd. The Electricity Commission Act 1950-1954 and the Electricity Commission (Balmain Electric Light Company Purchase) Act 1950 provided for the acquisition of the power stations and main transmission lines of those bodies. The transfer of the power stations and transmission lines of all these undertakings has now been effected. On 1st July, 1956, the Commission acquired the power station and bulk supply system of the Tamworth City Council, which supplied in bulk to a number of distributing bodies in the north of the State.

The main function of the Commission is the generation and transmission of electricity which it sells in bulk to distributing authorities (mainly local government bodies) throughout a large part of the State, to the government railways and tramways and to certain large industrial consumers. As the major generating authority, it is also responsible for the development of new power sources. An important exception is the hydro-electric potential of the Snowy Mountains region which is being developed by the Snowy Mountains Hydro-electric Authority, a Commonwealth Government body.

(ii) *Other Electricity Supply Authorities.* The retail sale of electricity to the public is, in general, carried out by separate electricity supply authorities—municipal and shire councils, electricity county councils (consisting of a grouping of shire and/or municipal councils) or private franchise holders. At 1st September, 1958, there were 76 of these supply authorities throughout the State of which 25 also generated part or whole of their power requirements. The majority of country power stations are small oil engine plants which are becoming increasingly costly to operate. Consequently, they are gradually being closed down as the main transmission network is extended further afield.

Over the past few years, there has been a distinct trend towards the consolidation of supply areas, many of which have been regarded as being too weak individually to form satisfactory areas for distribution. Generally these consolidations have taken the form of a county district consisting of a number of neighbouring shire and municipal areas grouped for electricity supply purposes only and administered by a county council of representatives elected by the constituent shire and municipal councils.

It is interesting to note that, of the 227 shires and municipalities in New South Wales, 199 are included in one or other of the 36 electricity county districts. Thirty two of these county districts have been constituted since 1945. The largest of the county councils is the Sydney County Council which at 30th June, 1958, was supplying 410,157 consumers in the Sydney Metropolitan Area. Unlike the other county councils, which are constituted under the provisions of the Local Government Act 1919, the Sydney County Council was specially constituted under the Gas and Electricity Act 1935.

(iii) *The Electricity Authority of New South Wales.*—The Electricity Authority was constituted under the Electricity Development Act 1945-1957, for the stated purpose of promoting and regulating the co-ordination, development, expansion, extension and improvement of electricity supply throughout the State. The Authority, which is a regulatory body only, consists of seven members of whom one is a full time Chairman. Like the Commission, it is responsible to the Minister for Local Government.

The main functions of the Authority are as follows :—

- (a) *Distribution.* Under the Act the approval of the Authority is required, *inter alia*, for the establishment or acquisition of an electricity trading undertaking by a local government council, for the granting or renewing by such a council of electricity franchise agreements or corresponding

agreements with other councils, and for the giving or taking of bulk supplies of electricity. It also has power to formulate proposals for the establishment of county councils.

In exercising these powers, the Authority is mainly concerned to see that distributing authorities are sufficiently strong to provide an economical, efficient and satisfactory service. Its most important activities in this regard are in investigating supply areas and in making recommendations to the Minister for the consolidation of such areas into county districts. Many of the new county districts referred to earlier have been formed largely as a result of the Authority's advice.

- (b) *Rural Electrification.* The Authority administers the rural electricity subsidy scheme under which rural electrification throughout the State is progressing very rapidly (see para. 4, page 219).
- (c) *Safety.* The Electricity Development Act 1945–1957 contains provisions for the making of regulations relating to most aspects of safety and these powers are being used more and more extensively. Safety regulations now in force cover such matters as inspection of consumer's installations, licensing of electricians and electrical contractors, approval of electrical appliances, safety of linemen and overhead line construction.
- (d) *Generation and Transmission.* The approval of the Authority is required for the establishment or extension of power stations and main transmission lines (with the exception of those of the Electricity Commission).

**3. Generation and Transmission.**—(i) *General.* Except in the Snowy Mountains district and in one or two other areas, New South Wales is lacking in major water power potential and for the generation of electricity the State is, therefore, mainly dependent on steam power stations. During the year ended 31st December, 1957, coal-fired stations generated 95.2 per cent. of the State's energy requirements, hydro-electric stations 3.9 per cent. and internal combustion plants 0.9 per cent.

The proportion of power generated in hydro-electric stations will increase considerably in the future with the development of the Snowy Mountains Scheme by the Commonwealth Government. Nevertheless, coal-fired steam power stations will continue to supply the greater part of requirements for the foreseeable future.

(ii) *Major Generating Stations.* In New South Wales, the generation of electricity has followed the general world trend towards large centralized power stations supplying large areas through inter-connected transmission networks. The greater part of the coal-fired generating plant is now concentrated within the bounds of the industrial centres of Sydney, Newcastle and Wollongong, where most of the population is also located.

As at 30th June, 1958, the major power stations of the State system of the Electricity Commission of New South Wales and their installed capacities were as follows:—*Steam*—Bunnerong "A" and "B" (Sydney), 375,000 kW; Pyrmont "A" and "B" (Sydney), 220,000 kW; White Bay (Sydney), 147,000 kW; Ultimo (Sydney), 80,000 kW; Balmain (Sydney), 107,000 kW; Port Kembla, 60,500 kW; Zarra Street (Newcastle), 65,000 kW; Tallawarra (Lake Illawarra), 120,000 kW; Wangi (Lake Macquarie), 150,000 kW; Wallerawang (near Lithgow), 60,000 kW; Lithgow, 27,000 kW; Maitland, 20,000 kW; Penrith, 20,000 kW; Liverpool, 20,000 kW; Tamworth, 27,000 kW; *Hydro*—Hume (near Albury), 50,000 kW; Burrinjuck (near Yass), 20,000 kW. There were also various other steam, hydro and internal combustion stations aggregating 49,070 kW. The total installed capacity of the Electricity Commission's system was 1,617,570 kW.

It will be seen, therefore, that the greater part of the Commission's generating plant is concentrated within a hundred mile radius of Sydney—the largest stations outside this area being located at Hume, capacity 50,000 kW and at Tamworth, capacity 27,000 kW.

(iii) *Interconnected Network.* Over 96 per cent. of electricity consumers in New South Wales are now supplied through the Electricity Commission's system. In this network, transmission lines operating mainly at 132 kV, 66 kV or 33 kV interconnect the various power stations and distribute power to load centres throughout most of the south-eastern portion of the State and the north coast region. At 30th June, 1958, there were in service 1,113 circuit miles of 132 kV lines (including 193 built for future 330 kV operation) and about 1,809 circuit miles of 66 kV lines. Interconnected with the Electricity Commission's system is an aggregate capacity of 70,425 kW for various stations, including the Northern Rivers, New England, Bega Valley and North-West County Councils and the Muswellbrook Coal Company making a total of 1,687,995 kW. In addition the whole of the output of the Guthega Power Station of the Snowy Mountains Hydro-electric Authority is fed into the Electricity Commission's system.

(iv) *Separate Systems and Total State Installed Capacity.* There are a number of separate systems and isolated plants which have not yet been interconnected with the main network and which at 30th June, 1958, had an aggregate installed capacity of 44,936 kW. Some councils along the Victorian border receive bulk supplies from Victorian authorities.

A number of local government bodies have undertaken the development of independent power stations. Of these the more important are:—The Northern Rivers County Council which has constructed a steam power station at Koolkhan (near Grafton) with an installed capacity of 28,750 kW and the North-West County Council which has established a 12,500 kW steam power station on the Ashford coalfield.

The Tamworth system which formerly supplied power to an extensive district in the north of the State from Tamworth power station through 66 kV and 33 kV transmission lines was interconnected with the main system in June, 1958 by a newly constructed 330 kV transmission line from Muswellbrook to Tamworth (79 miles). This line is now being operated at 66,000 volts but will be raised to higher voltages later.

The aggregate installed capacity for the whole of the New South Wales systems and isolated plants was 1,732,931 kW as at 30th June, 1958.

(v) *Future Development.* Additional plant is being installed in the new major power stations on the coalfields at Wangi, near Newcastle (180,000 kW), Tallawarra, near Port Kembla (200,000 kW), and Wallerawang, near Lithgow (180,000 kW). These stations are linked with Sydney by 132 kV transmission lines, which are being extended to supply increasing loads at various metropolitan and country centres. Sections of a superimposed 330 kV system, which will eventually extend from the Snowy Mountains area to Armidale in the north west, are also under construction or are already in use at low voltages. Stations under construction also include a steam power station at Muswellbrook (30,000 kW) and hydro-electric power stations at Warragamba Dam (50,000 kW) and Keepit Dam (6,000 kW). Plans provide for the construction of a second large thermal station at Lake Macquarie.

(vi) *Hydro-electricity.* The greater part of the hydro-electric potential of New South Wales is concentrated in the Snowy Mountains Area (*see* Snowy Mountains Hydro-electric Scheme, p. 214). Apart from this area, there are in operation the new hydro-electric station at the Hume Dam (50,000 kW), the 20,000 kW station at the Burrinjuck Dam, and the 7,500 kW station at the Wyangala Dam. The output of all these stations is dependent on the release of water for irrigation.

Of the remaining hydro installations, the largest is that of the New England County Council on the Oakey River, a tributary of the Macleay River, which has a capacity of 5,250 kW.

The Northern Rivers County Council operates a hydro-electric power station on the Nymboida River, a tributary of the Clarence River. This station has a capacity of 4,650 kW.

The Bega Valley County Council has constructed a hydro-electric scheme at Brown Mountain utilizing the headwaters of the Bemboka River. This installation has a capacity of 3,950 kW.

The Mullumbimby Municipal Council has in operation two 150 kW hydro units on Wilson's Creek, a tributary of the Richmond River.

**4. Rural Electrification.**—When The Electricity Authority of New South Wales was constituted in 1946, one of its first tasks was the devising of a scheme for subsidizing the cost of rural electrification. At that time, only 16,000 New South Wales farms were being served with electricity—less than one-quarter of those within reasonable reach of public electricity supply systems. In August, 1946, a subsidy scheme was approved by the Government and put into immediate operation. Under this scheme, local electricity suppliers receive subsidies from the Electricity Authority towards the cost of new rural lines. The amount of subsidy is based on the estimated cost of the proposed extension and the number of consumers able to be served by the new lines. In order that the funds available for subsidy purposes might be used to the best possible advantage, the scheme is designed to encourage local electricity supply authorities to construct the more economic extensions first. This has been achieved by fixing a limit to the cost eligible for subsidy. Originally this limit was £250 per consumer when averaged over the cost of the whole extension but the limit was raised to £400 in December, 1953. Some subsidy is paid on higher cost extensions but the excess over an average of £400 is not subsidized.

Between August, 1946, and October, 1958, about 29,700 miles of new distribution lines in rural areas were erected at a cost of over £19,800,000. These lines served 39,300 farms and 25,600 other rural consumers. During the same period the percentage of farms connected had been raised from 22 per cent. to 77 per cent. At 31st October, 1958, the Electricity Authority was committed to the payment of £9,026,084 in subsidies, of which £3,675,019 had actually been paid.

## § 2. Victoria.

1. **General.**—In Official Year Book No. 39, a detailed description is given of the development of electricity generation in the cities of Melbourne, Geelong, Bendigo and Ballarat up to the time of transfer of control of electricity undertakings in those cities to the State Electricity Commission of Victoria. An account is also given of the events culminating in the establishment of the Commission in 1919, and of the early developments in the Commission's undertakings.

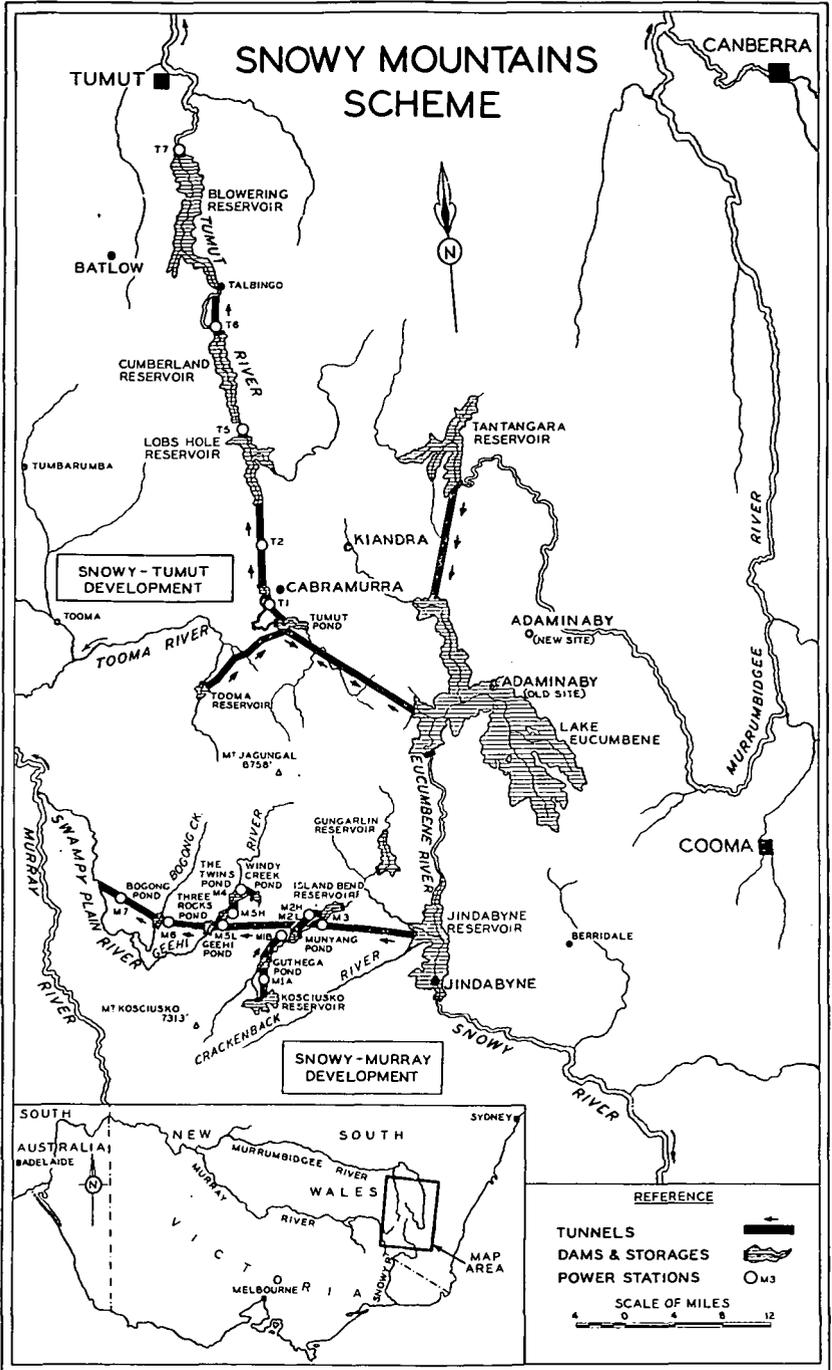
2. **State Electricity Commission of Victoria.**—(i) *Power and Fuel Authority.* Since it began operating in 1919, the State Electricity Commission has expanded and co-ordinated the production and supply of electricity on a State-wide basis to the point where its system now generates almost all the electricity produced in Victoria and serves about 97 per cent. of the population through a supply net-work covering more than two-thirds of the populated area of the State.

Development of Victoria's State electricity system is based on the utilization for both power and fuel of Victoria's extensive brown coal resources in the Latrobe Valley in eastern Gippsland, with supplementary development of the hydro-electric potential of north-eastern Victoria. Victoria shares equally with New South Wales in the electricity generated at Hume hydro station on the River Murray. Victoria is also entitled to one-third of the electricity from the Snowy Mountains Hydro-electric Scheme—after the Commonwealth has taken the power it needs for the Australian Capital Territory and within the Snowy Mountains area. Output from the Snowy scheme is to be available to Victoria from 1959. Almost two-thirds of the State's electricity is generated from brown coal, either used in its raw state or manufactured into higher quality fuel in the form of brown coal briquettes. Ninety-seven per cent. of the brown coal and all the briquette fuel are supplied by undertakings which the Commission itself owns and operates. Output of brown coal in 1957–58 from the three open cuts at Yallourn, Yallourn North and Morwell totalled 9,969,964 tons, of which 6,775,770 tons were used in the Commission's own power stations, and 2,429,096 tons were manufactured into 626,173 tons of brown coal briquettes, 27 per cent. of the briquette output then being used for electricity production in metropolitan and provincial steam power stations.

The two functions—generation of electricity and production of fuel—are closely integrated. Apart from the large proportion of brown coal and briquette fuel directly consumed in the power stations, the actual process of briquette manufacture results also in large-scale generation of electricity, since the steam needed for processing the raw coal in the briquette factory is first used to operate turbo-generators in associated power plant which functions as part of the briquette works.

(ii) *Status and Powers.* Constituted by Act of the Victorian Parliament, the State Electricity Commission is a semi-governmental authority administered since 1921 by a full-time Chairman and three part-time Commissioners. The principal duty of the Commission is to co-ordinate and extend on an economic basis the supply of electricity throughout Victoria. For this purpose, it is vested with power to erect, own and operate power stations and other electrical plant and installations, supply electricity retail to individual consumers or in bulk to any corporation or public institution, acquire and operate electricity undertakings, develop, own and operate brown coal open cuts and briquetting works, and develop the State's hydro-electric resources. From its own revenues, which it controls, the Commission must meet all expenditure in the operation of its power, fuel and subsidiary undertakings, and all interest and other charges incurred in the service of its loans and other capital commitments.

The Commission is the controlling authority for all electrical undertakings in Victoria. It is responsible for the registration of electrical contractors, the licensing of electrical mechanics, the control of installation methods and material and the testing and approval of electrical equipment and appliances. Incidental to its main operations, the Commission owns and operates the tramway systems in Ballarat and Bendigo. For the accommodation





of its employees at Yallourn, the Commission owns and administers the town of Yallourn and owns large housing estates in the surrounding area. In the Kiewa hydro-electric works area, it has built the two townships of Mount Beauty and Bogong, municipal administration of the former now being vested in the Shire of Bright.

(iii) *Electricity Supply.* At 30th June, 1958, consumers in Victoria served by the State system totalled 794,576. Outside the State system, there were 21,835 other consumers served by local country undertakings. The system supplies all the Melbourne metropolitan area and nearly 1,400 other centres of population.

The Commission sells electricity retail in all areas except part of the metropolitan area, where it sells in bulk to eleven municipal undertakings which operate as local retail supply authorities under franchises granted before the Commission was established. Bulk supply is also being provided at present to several New South Wales municipalities and irrigation settlements bordering the River Murray. Rural electrification is now more than four-fifths completed, the over-all plan to extend the State system to all populated regions of Victoria having made rapid progress during recent years. Consumers served by the State system outside the Melbourne metropolitan area (327,202) have more than doubled, and the number of farms connected to supply (38,999) has almost trebled in the past 10 years. Nearly three-quarters of the new consumers annually connected to supply are outside the metropolitan area. New farm connexions average about 3,000 a year.

The Commission's retail consumers totalled 619,969 at 30th June, 1958. Retail supply is administered through the metropolitan branch, seven extra-metropolitan branches (namely Ballarat, Eastern Metropolitan, Geelong, Gippsland, Midland, North Eastern and South Western) and the North Western Region, which comprises Bendigo branch and the two sub-branches based on Mildura and Horsham (Wimmera) respectively. At 30th June, 1958, there were branch and district supply offices in 77 towns in Victoria.

(iv) *Electricity Production.* Electricity generated in the State system totalled 5,113 million kWh in 1957-58 or 99 per cent. of all the electricity generated in Victoria. The system comprises 20 steam, hydro and internal combustion power stations with a total installed generator capacity at 30th June, 1958 of 1,211,000 kW. Eighteen of these power stations, totalling 1,186,459 kW are interconnected, and feed electricity into a common pool for general supply. The major power station in this interconnected system is the brown coal burning power station at Yallourn, which alone generates 42 per cent. of Victoria's electricity. Other power stations in the interconnected system comprise steam stations in Melbourne (Newport, Richmond and Spencer-street), Geelong (two stations) and Ballarat (two stations); hydro-electric stations at Kiewa (two stations) and Eildon, and on the Rubicon and Royston Rivers (four stations), near Eildon; and three internal combustion stations at Shepparton, Warrnambool and Hamilton. All are Commission owned, except Spencer-street power station, which remains the property of the Melbourne City Council, although operated as a unit in the interconnected system. Also linked with the Victorian interconnected system is the hydro station at Hume dam on the River Murray. This power station is operated by the Electricity Commission of New South Wales. Output and operating costs are shared equally by Victoria and New South Wales.

In meeting the total demand on the system, which fluctuates throughout the day and from month to month, each group of stations in the interconnected system, whether steam, hydro or internal combustion, is assigned a predetermined function dependent upon the availability of power from each group and the over-all economics of generation. The various stations are utilized in the combination that will meet the system load most economically at a given time. This procedure results in an arrangement of the system on the following general lines:—

- (a) Yallourn power station, owing to the low cost of extraction and ample supply of raw brown coal, is a base load station, and is operated continuously at its maximum economic capacity.
- (b) Metropolitan and provincial steam stations and provincial internal combustion stations situated close to load centres are designed to operate as peak load stations to assist in meeting the heavy, short period load. Pending the completion of extensions to Yallourn power station, a substantial proportion of the base load on the system is carried by Newport power station.
- (c) Hydro stations are operated in accordance with the availability of water. They are designed to effect, where possible, a saving of the more expensive fuels used in the metropolitan and provincial thermal stations. As the primary purpose of Eildon reservoir is to provide water for irrigation,

generation of electricity will be mainly governed by irrigation requirements, but provision has been made for limited operation of the power station in winter when electricity requirements are at their heaviest and there is no irrigation demand for water. Similar considerations apply to Hume hydro station. Since it also operates on water released for irrigation, no regular output of electricity can be expected during the non-irrigation months in the winter.

Commission power stations not yet connected with the rest of the State system comprise the two steam stations (Redcliffs and Mildura) serving the Mildura region.

(v) *Transmission and Distribution.* The electrical transmission and distribution system in the State supply network at 30th June, 1958, comprised 27,449 miles of transmission and distribution power lines, 12 terminal receiving stations and over 18,000 distribution substations. Main transmission is by 220 kV, 132 kV and 66 kV power lines which supply the principal distribution centres and also provide inter-connexion between the power stations. The 220 kV system connects Yallourn and Kiewa with metropolitan terminal stations. From Yallourn also, there are 132 kV transmission lines to Melbourne. The 66 kV lines radiate from Melbourne to Geelong and Warrnambool, Ballarat and Bendigo, and also to Benalla and other main centres in the North East. Further 66 kV lines radiate from Yallourn to main centres in Gippsland.

(vi) *Future Development.* In conformity with its dual responsibility for producing and supplying Victoria's electricity and producing a large proportion of the State's solid fuel, the Commission's developmental programme is in two parts, which are, however, closely dependent one upon the other. The major part of this programme is for the development of the brown coal undertakings at Yallourn and Morwell in the Latrobe Valley and the erection of a large new brown coal burning power station (Hazelwood) near Morwell; and the second and lesser part for the development of the hydro undertaking at Kiewa and construction of a high voltage transmission line for the supply of power to be purchased from the Snowy Mountains Hydro-electric Authority. At the same time, the Commission will continue its programme of rural electrification, extension of the State system (particularly in western and north western Victoria) and reinforcement of supply by the establishment of a 220 kV power transmission grid designed ultimately to encircle central Victoria, linking all principal power stations and all major centres of distribution.

Yallourn power station is being greatly enlarged. Four 50,000 kW generators in two extensions have been added recently. The first extension was completed in 1956 and the second was nearing completion in the winter of 1958, with its two generators and four of its six boilers in service. A third extension of 240,000 kW capacity is due for completion in 1962. Enlargement of the power station will require a corresponding expansion in production of brown coal at Yallourn. New dredger plant will increase annual output at the Yallourn open cut to over 12 million tons in 1962. This will complete the Yallourn power generation development, except for the eventual replacement of 175,000 kW of old plant with one generating unit of about 200,000 kW capacity.

At Morwell, six miles from Yallourn, the Commission is developing a second brown coal power and fuel project. The new project will comprise a large brown coal open cut and a major new power station which will operate in association with a large new briquetting plant. Some of the electricity generated at Morwell will be needed to operate the briquette works, but most of the output of the power station will be transmitted through Yallourn to metropolitan terminal stations for general supply through the State network. The power station and two units of the briquetting works are now being built, and the power station will start generating electricity in 1959. Output for general supply will increase progressively to 142,000 kW in 1963. Briquette production will start in 1959 and will increase to 1,500,000 tons a year in 1963. Annual output of brown coal at the Morwell open cut will increase progressively to about six million tons over the same period.

In order to make the best possible use of the new brown coal open cut already in the initial stages of production at Morwell, the Commission is now planning to build, south of Morwell, a large new brown coal burning power station (Hazelwood Power Station) of about 1,000,000 kW capacity in units of 200,000 kW each or larger, the first to be in service not later than 1964.

(vii) *Hydro electricity.* At the Kiewa hydro-electric undertaking, where two stations, totalling 87,600 kW capacity, are now in service, work is in progress on a third power station of 96,000 kW capacity, which is due to have the first of its six generators operating in 1960 and the remainder in service late in 1961. Work is also in progress on the construction of Rocky Valley Reservoir, which is designed to provide the main high level storage for the operation of the Kiewa power stations.

Connexion with the Snowy Mountains undertaking will be made by a new high voltage transmission line which will feed into the Victorian system via Dederang, near Kiewa. It will operate at 330 kV. Extensions of the 220 kV grid are due for completion as follows:—Geelong to Melbourne (1958); Kiewa to Shepparton (1958); Shepparton to Bendigo (1959); Temporarily the Geelong–Melbourne line, the Geelong–Colac 220 kV line (completed in 1957), and the Shepparton–Bendigo line will operate at 66 kV. They will be activated at 220 kV at a later date. Eventually the 220 kV grid will be continued from Bendigo via Ballarat to connect with the Melbourne–Geelong–Colac section at Geelong, and will also extend along the Murray Valley to Redcliffs, near Mildura.

3. *Local Country Electricity Undertakings.*—At 30th June, 1958, there were 37 independent electricity undertakings in country centres in Victoria generating and distributing their own local supply. Most of these undertakings were in the far south west, west and north west of the State. Under the State Electricity Commission's rural electrification programme, almost all the independent local country undertakings will ultimately be acquired and absorbed into the State system. For the year 1957–58, the total production of the independent undertakings was 44 million kWh. The number of consumers at 30th June, 1958, was 21,835. The operation of the independent undertakings is governed by the Electric Light and Power Act, 1958, which the State Electricity Commission administers.

### § 3. Queensland.

1. *General.* In Official Year Book No. 39, an account is given of the growth of electricity generation in Queensland, with particular reference to the City Electric Light Co. Ltd. of Brisbane (now the Southern Electric Authority of Queensland), the Brisbane City Council and the Toowoomba Electric Light and Power Co. Ltd.

The first of these organizations supplies a large part of Brisbane's electric power requirements, and those of a considerable rural area in the south-east corner of the State, from a modern power station at Bulimba, a suburb of Brisbane. Capacity is 95,000 kW at Bulimba "A", plus 10,000 kW, "packaged plant" at Abermain (near Ipswich) and 90,000 kW at a new generating station known as Bulimba "B". The output from a 3,200 kW hydro-electric unit installed at Somerset Dam near Brisbane is fed into the Southern Electric Authority system. With these plants 679 million kWh were generated in 1956–57 while the total number of the Authority's consumers at 30th June, 1957, was 108,487.

The Brisbane City Council's electrical undertaking and power production in 1956–57 had an installed capacity of 135,000 kW plus a 10,000 kW "packaged" plant erected at Tennyson, units purchased and generated amounted to 584 million kWh, and there were 124,990 consumers connected.

The Toowoomba Electric Light and Power Co. Ltd., which commenced operations in 1905, has now been absorbed by the Southern Electric Authority of Queensland.

The generation and distribution of electric power in Queensland had, until the last decade, tended to lag behind developments in this field in other States of Australia. The comparatively slow growth in the production and consumption of electricity can be attributed to some extent to the absence, prior to 1938, of a central statutory authority constituted to undertake the functions of co-ordinating, unifying and controlling the production and transmission of electric power. In addition, Queensland's vast area, coupled with a low population density, made large-scale rural electrification, elsewhere than in the south-eastern portion of the State, which surrounds the major centres of industry and population, an uneconomic proposition.

Before establishment of the Regional Electricity Boards in 1945, no attempts had been made to unify or co-ordinate electricity supplies outside of south-eastern Queensland, and rural electrification, apart from reticulation within certain townships, was practically unknown.

2. **Royal Commission on Generation and Distribution of Electric Power in Queensland, 1936.**—On 5th December, 1935, the Queensland Government appointed a Royal Commission to inquire into and make recommendations on matters relating to the generation and distribution of electric power in Queensland. An account of the results of its investigations and of the alternative proposals put before it will be found on p. 1182 of Official Year Book No. 39.

3. **The State Electricity Commission of Queensland.**—The State Electricity Commission of Queensland commenced to function during January, 1938. Its main powers were to secure a proper and efficient supply of electric power, review tariffs, grant licences to supply electricity, secure the safety of the public, and control and advise electrical undertakings generally. It was thus a controlling authority as distinct from an operating authority. Details of its growth and development may be found in earlier issues of the Official Year Book (see No. 44, p. 284). Since its inception, the Commission has made considerable progress in its task of developing the State's power resources and promoting a more widespread use of electric power. The degree of utilization of electrical energy in Queensland now compares favourably with other States in the Commonwealth.

4. **Regional Electricity Boards.**—With a view to facilitating the control and development of electricity supply in areas of low population density and those having a predominantly primary producing economy, the Government, in 1945, passed the Regional Electric Authorities Act providing for the creation of regions of electricity supply and the constitution of Regional Electricity Boards.

Soon after passage of the Act, four Regional Boards were constituted, namely, Wide Bay, Capricornia, Townsville and Cairns. A fifth Board, entitled South Burnett, became an operating authority in October, 1947, but on 1st July, 1951, was absorbed in the Wide Bay Regional Board and the organization is now known as the Wide Bay-Burnett Regional Electricity Board.

As from 1st March, 1957, a further Regional Board became operative, covering the areas of Mackay, Sarina, Proserpine and adjacent rural areas under the name of Mackay Regional Electricity Board.

Supply throughout this Region is provided from the central generating station at Mackay and accelerated electrical development of this area is being undertaken. The Townsville Regional Electricity Board's area was extended in July, 1957, to include that of the Bowen electricity undertaking. The local authority areas of Thursday Island and Cook were included in the Cairns Regional Electricity Board's area from 1st July, 1956, and 1st July, 1957, respectively. As from 1st January, 1958, the Capricornia Region was extended to include the Shires of Bauhinia, Belyando, Emerald and Peak Downs in Central-West Queensland.

Activities of the original four Regional Boards in 1956-57 and 1957-58 compared with operations of the stations located in regions in 1945-46, and totals for Queensland as a whole are shown in the following table:—

#### QUEENSLAND : REGIONAL OPERATIONS.

Region.	1945-46.		1956-57.		1957-58.	
	Units Generated.	No. of Consumers.	Units Generated.	No. of Consumers.	Units Generated.	No. of Consumers.
	m.kWh		m.kWh		m.kWh	
Wide Bay-Burnett .. ..	13.7	11,467	71.8	26,624	79.0	28,003
Capricornia .. ..	19.5	11,196	107.6	19,718	128.8	21,743
Townsville .. ..	25.8	11,612	104.2	23,325	(a) 97.1	25,812
Cairns .. ..	22.7	9,722	89.9	18,620	150.5	19,930
<i>Total</i> .. ..	81.7	43,997	373.5	88,287	455.4	95,488
<b>Queensland</b> .. ..	<b>487.0</b>	<b>194,429</b>	<b>1,699.8</b>	<b>350,155</b>	<i>b</i> <b>1,869.0</b>	<i>b</i> <b>367,600</b>

(a) In addition 28 m. units were purchased from Tully Falls power station.

(b) Estimated.

Generator capacity of the five existing Regional Boards installed at 30th June, 1958 was:—Wide Bay-Burnett, 37,500 kW; Capricornia, 39,743 kW; Townsville, 40,970 kW; Mackay, 9,500 kW; Cairns, 54,801 kW; total 182,514 kW.

5. Creation of Southern Electric Authority of Queensland.—A further major step in electrical progress, comparable with that taken when the agreements with the City Electric Light Co. Ltd. and Toowoomba Electric Light and Power Co. Ltd. were first entered into, was taken by the passing of the Southern Electric Authority of Queensland Act of 1952. This Act constituted the City Electric Light Co. Ltd. as a public authority to be known as the Southern Electric Authority of Queensland.

Two Government representatives are included on the Board of the new Authority, whose establishment prepares the way for the complete amalgamation, in due course, of the electrical undertakings serving the south-eastern Queensland area of supply.

As from 1st July, 1954, the Southern Electric Authority acquired the Toowoomba Electric Light and Power Co. Ltd., thus bringing this company's area of supply under its control. The Southern Electric Authority is now responsible for the electrical supply and development of a consolidated area of 19,386 square miles.

6. Hydro-electricity.—Behind the coastal plain of the Cairns-Ingham area is an extensive plateau, the elevation ranging from 2,000 to 3,000 feet, although isolated peaks exceed 4,000 feet. The short coastal streams which rise on the plateau descend rapidly into deep gorges, which they have cut through the old divide. With heavy monsoonal rainfall on their catchments and concentrated fall, these streams represent a considerable potential source of power, but storage, which can be provided in most cases, is essential to control the very variable flow.

There is a pronounced wet season from December to March, with a dry season from July to November. Average annual rainfall varies greatly with geographic location, being 178 inches at Deeral (midway between Cairns and Innisfail) but only 34 inches at Cashmere (120 miles south-west of Innisfail).

In 1935, a small hydro-electric power station was placed in service at Barron Falls, ten miles north-west of Cairns. The station comprises three 2,000 h.p. turbines, each driving a 1,320 kW generator, and with a hydraulic head of 410 feet. An output of 25 million units was attained during 1957-58, the station operating essentially as a run-of-river station without any significant water storage capacity being available. Power is fed at 22 kV into the main network at Mareeba and Cairns.

The hydro-electric power scheme at Tully Falls was commissioned in September, 1957, with an initial plant installation of 36,000 kW. Work is in hand on the installation of a further two 18,000 kW sets, to make a total installation of 72,000 kW. Water controlled by Koombooloomba Dam at present under construction on the upper Tully River is diverted, a short distance above Tully Falls, through a tunnel and steel penstocks to an underground power station in the gorge at the foot of the falls operating with Pelton driven generators under a head of 1,485 feet. Power is transmitted to the load centres at Cairns and Innisfail by means of 132 kV transmission lines. Future automatic power plants upstream and downstream from Tully Falls consisting of two 7,500 kW sets under 405 feet head and one 5,400 kW set under 230 feet head are under consideration. The combined peak load for the three plants would then be 69,000 kW. Interconnexion of the Tully scheme with the Townsville area, which is also being served by a thermal station, was completed in February, 1958, by the provision of a 160 mile double circuit 132 kV transmission line. On present estimates, power from the completed Tully scheme will be sufficient to supply the inter-connected area until 1963 when additional power will be required.

The construction of a new peak load power station at Barron Falls to provide a firm (dry year) output of 60,000 kW at 25 per cent. load factor (i.e. a firm output of 131 million units per annum) has been authorized by the Queensland Government, and construction of this scheme will ensure an adequate supply of power to the Cairns and Townsville areas until 1967.

The completed scheme will provide for an underground power station below the Barron Falls containing two 30,000 kW Francis turbines, operating under a head of 920 feet. Water will be carried from a pond above the Falls by horizontal tunnel and pressure tunnel to the power house. The existing weir will be raised by 8 to 16 feet for this purpose. An earth and rock fill dam will be built on Flaggly Creek, a tributary of the Barron, to provide storage capacity for the scheme, although initially spare storage capacity at the Tinaroo Falls Dam will be used.

Other major schemes which are currently being investigated include North Johnstone-Russell Rivers (32,000 kW); Beatrice-North Johnstone Rivers (9,000 kW); South Johnstone River (25,000 kW); Herbert River (90,000 kW).

In the Townsville Region, the Commission, acting on behalf of the Burdekin River Authority, investigated the proposed hydro-electric development of the Burdekin. The Scheme envisaged a power plant immediately below the Burdekin Falls Dam to operate under an average head of 225 feet.

In relation to other projects, the Scheme is not as favourable economically as a power production project alone but, as a joint power production, irrigation and flood mitigation scheme, it has considerable potentialities. An estimated output of 80,000 kW at 50 per cent. load factor would be available.

The State Electricity Commission, in conjunction with other Government Departments is carrying out an extensive investigation into the development of hydro-electric resources. It is estimated that full development of the hydro-electric potential of North Queensland would provide the equivalent of over 300,000 kW of power at 50 per cent. load factor or approximately 1,300,000,000 units per year.

A number of small hydro-electric projects are being investigated in other parts of the State. On the Broken River near Eungella (50 miles west of Mackay) a site exists for the establishment of a peak load hydro-electric power station, and this is being examined. The construction in the future of a major dam on the Dawson River at Nathan Gorge (near Cracow) in the Capricornia Region for irrigation purposes, would permit the installation of a small hydro-electric power station at this site if the power produced can be economically absorbed. A plant of 3,200 kW capacity has been installed to utilize the outflow from Somerset dam on the Stanley River a few miles above its confluence with the Brisbane River.

**7. New Capacity.**—(i) *Regions.* To provide for development of the electric power resources in the regions, the State Electricity Commission formulated a ten-year programme divided into two five-year periods. In the first, it was planned to erect main transmission systems to connect existing power stations located within the regions and supplement generating capacity by the construction of new stations. Work on this section of the plan in the original Regional Board areas is now virtually complete. In the second, the transmission system will be extended to more sparsely settled areas, the ultimate purpose being the provision of "ring" transmission lines throughout each region and interconnexion between the regions.

A number of new generating stations have been commissioned as follows :—Wide Bay (Burnett Region), of which 15,000 kW was placed in service during September, 1951, and 7,500 kW in 1954, while a further set of 15,000 kW was installed in 1957. Rockhampton (Capricornia Region) of which 22,500 kW was placed in service during September, 1952 and a further 15,000 kW in May, 1956, with a further 15,000 kW at present in process of installation; and Townsville (Townsville Region) of which 22,500 kW was commissioned in July, 1953, and a further 15,000 kW in January, 1956. Plans are in hand for the installation of a further 15,000 kW at Townsville. Each of these stations will have an ultimate installed capacity of 52,500 kW and be steam-operated. In the Cairns Region, construction is in hand on the final two 18,000 kW turbo alternator sets at the Tully Falls hydro-electric power station. The scheme is designed for an ultimate installed capacity of 92,400 kW. To augment existing capacity and to cover demands prior to the operation of Tully Falls, the Cairns Regional Board has installed twenty-one diesel units with a total capacity of 14,485 kW.

The Tully Falls scheme (*see* para 6, p. 227) is planned to link with the Townsville Regional Electricity Board's system for the purpose of marginal supply, and construction of this interconnexion was completed by the close of 1957. Preliminary work has commenced on the construction of a further hydro-electric scheme on the Barron River which should be completed by June, 1963, and will add 60,000 kW to the available hydro-electric generation capacity in the area. The first stage of the scheme's development is estimated to cost £5,850,000, and initially full use will be made of available storage capacity at Tinaroo Falls Dam, thus enabling construction of a £5,000,000 storage dam on Flaggy Creek to be postponed for a number of years.

At Mackay, where supply was first given in 1924, a Regional Electricity Board has now been constituted and a 66 kV transmission line to Proserpine is under construction. The generating capacity of the stations under the control of this Regional Board is 9,500 kW, and a further 2,750 kW unit is being installed. At Bowen, the Town Council, which established the service in 1952, has now transferred control of its area to the Townsville Regional Electricity Board, and transmitted supply is being provided by a line now under construction.

During 1935, a small (3,800 kW) power house—Australia's first underground hydro station—was placed in service at Barron Falls near Cairns. When the Cairns Regional Board was established during 1946, operation of the station passed to the Board's control and now comprises part of its generating plant.

(ii) *Western Queensland.* In western Queensland, where a number of small isolated generating stations supply power to some of the larger towns, the Commission has evolved a plan to increase and modernize existing capacity. It involves installation of small internal combustion units ranging in size from 100 kW to 600 kW according to the load likely to be experienced, and conversion from direct to alternating current supply. The Government has assisted the scheme by subsidy—a feature of electrical development in Queensland. Assistance provided for regional electrical development comprises subsidies of up to one-third of capital cost on annual loan charges, with special subsidies of up to 50 per cent. for authorities in the larger towns outside the Regions.

In addition to improving supplies to the larger western towns, a scheme has been devised for electricity supplies for smaller towns in the western districts, where consumers range from 50 to 200. Subsidies of 65 and 60 per cent. will apply in those cases where the number of consumers supplied is less than 100 and 200, respectively. This plan is now being implemented and at 30th June, 1957, 27 townships in the west of Queensland had been provided with electricity. The power is being supplied by small oil driven generating sets with automatic controls which can be run with a minimum of operating attendance. In addition, investigations of the possibility of supply have been carried out at a number of other small centres.

Coal-burning gas producers have been successfully commissioned for public electricity supply purposes at Longreach, Clermont, Dalby, Blackall and Barcaldine and further extensions of their use in western Queensland is predicted, as lower tariffs and more efficient production of electricity should follow their use.

(iii) *South-eastern Queensland.* To increase the availability of electric power in the south-eastern area of the State, the two major generating authorities, in conjunction with the Commission, have power station projects under construction which are designed to place in service, by 1958, new generating units totalling 400,000 kW. The Southern Electricity Authority is developing a station known as Bulimba "B" on a site adjacent to Bulimba "A". 90,000 kW had been installed to 30th June, 1958, with a further 30,000 kW to be commissioned during 1958–59 and the ultimate capacity may reach 180,000 kW. At Tennyson in the Brisbane area, the Brisbane City Council has constructed a new power station with an initial capacity of 60,000 kW which ultimately may be increased to 180,000 kW. At 30th June, 1958, generating plant of 90,000 kW was in service at this new station. To supplement capacity pending operation of these projects, "packaged" generating units totalling 20,000 kW were obtained from overseas and commissioned early in 1953, one 10,000 kW set having been installed at Tennyson and another 10,000 kW set at Abermain near Ipswich.

The power stations of the two major generating authorities at New Farm and Bulimba are interconnected at 33 kV.

#### § 4. South Australia.

1. *General.*—An account referring to the companies generating electric power in South Australia prior to the establishment of the Adelaide Electric Supply Co. Ltd., and describing the development of that company's activities, was given in Official Year Book No. 39. Also included in the account was some reference to the early measures of public control over electricity supply in South Australia and the extent to which they were applied, and also to the inquiries into the activities of the Adelaide Electric Supply Co. Ltd. in 1932 and 1935.

Following upon an inquiry instituted by the Government in 1943, relative to measures for increasing electricity supply to the metropolitan area and country districts, the Electricity Act 1943 was passed which, *inter alia*, established the South Australian Electricity Commission. However, until the State assumed full responsibility for the supply of electric power, this body was not able to do much more than exercise the formal functions conferred on it by the Act.

2. *The Electricity Trust of South Australia.*—Early in 1946, a Bill was passed transferring the assets of the Adelaide Electric Supply Co. Ltd. to the newly formed public authority, the Electricity Trust of South Australia, which became responsible for unification and co-ordination of the major portion of the State's electricity supplies. This legislation

provided that the Trust should take over the powers vested in the South Australian Electricity Commission under the 1943 Act, which, after establishment of the Trust, would cease to exist. In addition to the powers specified in the Adelaide Electric Supply Company's Acts 1897–1931, the Trust may, *inter alia*, supply electricity direct to consumers within a district or municipality with the approval of the local authority, and by agreement with other persons who generate or supply electricity, arrange to inter-connect the mains of the Trust with those of other persons, and give or receive supplies of electricity in bulk.

**3. Capacity and Production.**—There are three main categories of organizations generating electric power in South Australia, namely :—(a) Governmental, which include the Electricity Trust ; (b) Local Authorities, e.g., municipal and district councils, and Renmark Irrigation Trust ; and (c) Other, including individuals and firms primarily engaged in generating power for sale, firms generating power primarily for their own use but supplying outside consumers, and firms generating power solely for their own use.

In 1956–57, total installed capacity in South Australia was 353,830 kW, an increase of 32,961 kW on the year before. The units generated totalled 1,315 million kWh compared with 1,204 million kWh in the previous year.

Of the total installed capacity, the Electricity Trust of South Australia operated plant with a capacity of 316,100 kW. It is thus the most important authority supplying electricity in the State. There were approximately 252,600 ultimate consumers of electricity, of whom 227,553 were supplied by the Trust. Its major steam stations were Osborne "A" (70,000 kW), Osborne "B" (150,000 kW) and Port Augusta "A" (75,000 kW) while the balance of the capacity controlled consists of house sets and regional stations at Port Lincoln and Mount Gambier.

No hydro-electric potential exists in South Australia. Steam generating units comprise 95 per cent. of installed capacity and the balance is internal combustion equipment. Until recently, all fuel consumed in the thermal stations was obtained from sources outside the State, and at times power restrictions were necessary owing to the inadequacy of supplies.

**4. Leigh Creek and other New Capacity.**—With a view to reducing the dependence on external sources of fuel, steps have been taken to produce local coal and to install plant to use it. Fairly extensive deposits of low-grade sub-bituminous coal are obtainable at Leigh Creek, about 360 miles north of Adelaide. Under the Electricity Trust of South Australia Act Amendment Act 1946, the Trust was given authority to develop Leigh Creek coal for use in its own undertakings and also for sale to other consumers. Production from the Leigh Creek field commenced in 1944, and in the year ended 30th June, 1957, 508,430 tons of coal were sold. Of this amount, the Electricity Undertaking used 452,772 tons.

In order to cope with the rapidly increasing demand for power, the Electricity Trust is installing an additional 30,000 kW unit at Osborne "B" Power Station. This will complete the "B" station which will then have a total capacity of 180,000 kW. Another major work under construction is the power station at Port Augusta with an ultimate capacity of 90,000 kW. This power station, which was commissioned in June, 1954, is located at Port Augusta because of its proximity to the Leigh Creek coalfield and will use Leigh Creek coal exclusively. A new standard gauge railway line connecting Leigh Creek with Port Augusta was constructed by the Commonwealth Railways Department. The power station is inter-connected with the Metropolitan Area by two transmission lines which will supply power also at intermediate points. The Trust is to construct a second power station at Port Augusta to be known as Port Augusta "B". This station will have a capacity of 180,000 kW making the combined capacity at Port Augusta 270,000 kW. In addition at Port Lincoln, the Trust has built a steam power station having a capacity of 5,000 kW and burning fuel oil and at Mount Gambier is building a steam power station of 16,800 kW capacity which will burn either wood waste or fuel oil. Both of these stations will replace existing diesel stations.

## § 5. Western Australia.

**1. General.**—Electrical undertakings in Perth and Fremantle formerly owned by the Perth City Council, the Western Australian Government Electricity Supply, the Fremantle Municipal Tramways and Electric Lighting Board and other metropolitan municipal and road board supply authorities have now been taken over by the State Electricity Commission of Western Australia. For information on the early history of electricity supply in the metropolitan area, see Official Year Book No. 39, p. 1189.

2. **Metropolitan Undertaking.**—Statistics relating to activities of the Metropolitan undertaking are shown in the following comparative table.

**WESTERN AUSTRALIA : METROPOLITAN UNDERTAKING.**

(Including Bunbury Power Station).

Particulars.					1938-39.	1956-57.	1957-58.
Plant capacity	..	..	..	kW	57,000	{ a 49,000 b 160,000	(a) 25,000 (b) 160,000
Maximum load	..	..	..	kW	33,000	119,000	124,000
Units generated	..	..	..	Million kWh	137	533	571
Coal used per unit generated	..	..	..	lb.	2.77	1.57	1.55
Coal used	..	..	..	tons	168,722	355,360	389,423

(a) 40 cycles. (b) 50 cycles.

As a result of a separate inquiry conducted at the same time as the early investigations into the proposed new station at South Fremantle, a recommendation was made favouring conversion of the East Perth 40 cycle system to the British and Australian Standard Frequency of 50 cycles per second. The recommendation was adopted and implemented by making the frequency of generation at South Fremantle 50 cycles and installing at East Perth a frequency changer able to convert 25,000 kW of energy from one frequency to the other.

3. **Kalgoorlie.**—In Kalgoorlie, the Municipal Council supplies approximately 3,800 consumers with either direct or alternating current. A diesel station of 1,825 kW generating capacity provides direct current to the limit of its capacity. Alternating current is purchased from Kalgoorlie Power Corporation and retailed by the Council to some consumers, while portion is passed through a rectifier to convert it to direct current. Primarily established to supply power to the gold mines, the Kalgoorlie Electric Power and Lighting Corporation operates a steam station of 11,000 kW and maintains a 22 kV line of 21 miles to the Celebration mine. Alternating current is also supplied to about 1,400 consumers. The Corporation's undertaking generates approximately 35 million kWh per annum and boilers are fired by Collie coal.

4. **General Pattern of Electricity Supply.**—The pattern of the generation and distribution of electric power in Western Australia consisted of a number of isolated systems each supplying a particular area. Except in the metropolitan area and in the area embraced by the South-West Power Scheme (See para. 6 below), where in both cases electricity supply is in the hands of the State Electricity Commission of Western Australia, local authorities are generally responsible for the supply of electricity for domestic and industrial purposes. In the area between the Great Southern Railway from Northam to Albany and the west coast, however, the State Electricity Commission has now constructed transmission lines to give central station supply to the towns and their surrounding rural areas. In addition, there are several mining companies which generate electricity for use in their mines. In order to cater for the expected growth in demand, the capacity of the State's major generating stations is being increased.

The system in the Metropolitan area has been inter-connected with the Bunbury area by means of a 132 kV transmission line, and a second similar line is in course of construction.

The main load centre of the State is, of course, the Perth-Fremantle area into which is concentrated the major portion of the State's population and industry. The inter-connexion between the Metropolitan and Country systems is, however, expected to lead to a gradual decentralization of load.

5. **The State Electricity Commission of Western Australia.**—(i) *Origin and Aims.* In order to ensure an organized and co-ordinated future growth of electricity generation and distribution throughout the State, the Government introduced a Bill in 1945 to establish the State Electricity Commission, which, together with an Electricity Bill, became law early in 1946. Under these Acts, the Commission was given power, *inter alia*, to secure the ultimate co-ordination of all State or other electrical undertakings in the State, to construct and operate power stations and transmission lines and purchase as a going concern and carry on the undertaking of any supply authority. Under the Electricity Act, which should be read in conjunction with, and is subject to, the State Electricity Commission Act, no person or organization is permitted to construct or extend an electricity supply undertaking without consent from the Commission. Local authorities are empowered to operate and construct power stations and other works associated with the supply of electricity, provided that authority is first obtained from the Commission and any proposals are not inconsistent with the Commission's plans.

(ii) *New Projects.* Since its inception in 1946, the Commission has proceeded with the task of increasing generating capacity in an endeavour to cater for a greatly increased demand for power. Long-range plans were formulated to inter-connect the south-western portion of the State with the Perth-Fremantle system. One of its most important and immediate problems was to increase the capacity of the generating equipment serving Perth and Fremantle. During the 1939-45 War years, it became evident that the growth of demand for electric power would necessitate provision of additional generating equipment in the metropolitan area as soon as possible. Accordingly, the Government Electricity Supply authority commenced design work for a new station of 50,000 kW capacity. Contracts were let in 1945 and construction commenced on a site selected at South Fremantle, on the coast south of Fremantle proper. Responsibility for completion of this project was given to the Commission under the Act of 1946. As it was considered that an even larger station would be required, provision was made for the installation of two additional units giving an ultimate capacity of 100,000 kW. Steam is furnished by eight boilers designed to use pulverized coal from Collie, which is located about 120 miles from the station. At the end of 1954, four units had been placed in service and the output was being fed into the metropolitan system.

At the East Perth power station, a new 30,000 kW unit has been commissioned and an additional boiler installed. A 25,000 kW unit, commissioned in 1938 (generating 40 cycles) is also available at this station.

**6. South-west Development.**—At the request of the Government, the Electricity Advisory Committee in 1945 submitted a report recommending, amongst other things, that a national power scheme for the south-west be proceeded with. The plan provided for acquisition of the existing Collie power station and installation of additional generating capacity, construction of a power station at Bunbury and inter-connexion of the south-west scheme with the metropolitan system. On 12th October, 1946, the State Electricity Commission acquired the Collie power station, which prior to 1946 was owned and operated by the Collie Power Company Limited. At the date of acquisition, the station's installed capacity was 5,000 kW, comprising two steam units. The capacity of the station was increased to 12,500 kW in 1952.

Since 1950, the Commission has acquired a number of electrical undertakings from municipal bodies and private organizations in the south-west area and is proceeding with arrangements for the purchase of others. In August, 1951, the first portion of the South-West Power Scheme was officially opened at Collie and many of the south-west towns have now been connected by transmission line to the Collie Power Station. When completed, a system of power lines will reticulate electricity over an area of approximately 1,800 square miles. The first 30,000 kW unit and associated boilers at Bunbury Power Station have been placed in service. Work is proceeding as programmed on three similar units to give the Station an ultimate capacity of 120,000 kW. The first section was officially declared open on 23rd August, 1957.

Diesel stations of 4,400 kW capacity at Albany serve the towns of Albany, Denmark, and Mount Barker in the extreme south of the State.

## § 6. Tasmania.

**1. General.**—A considerable part of the water catchment in Tasmania is at high level, with a substantial natural storage available, and this has made it possible to produce energy at lower cost than elsewhere in Australia, or in most other countries. Other factors contributing to the low costs are that rainfall is distributed fairly evenly throughout the year, with comparatively small yearly variations. The cheap power has led to the establishment in Tasmania of several large electro-chemical works with high load factor, and as a consequence the system load factor is also very high (at present 68.5 per cent.).

For information on hydro-electric development in Tasmania prior to the establishment of the Hydro-Electric Commission in 1930, see Official Year Book No. 39, pages 1192-3.

**2. The Hydro-Electric Commission.**—(i) *Present System.* In 1929, the Government passed the Hydro-Electric Commission Act, under which was established the Hydro-Electric Commission and which vests in the Commission, with some minor exceptions, the right to use the waters of the State of Tasmania and authorizes it to develop and reticulate electric power for all purposes. In 1930, this corporate body took over the State hydro-electric undertaking and the business of the Hydro-Electric Department.

The first project undertaken by the Commission was the Shannon Power Development which utilizes 258 feet of the difference in level between the Great Lake (Mienna Dam) and Waddamana forebay. A small earthen dam diverts the outflow from the Great Lake through 2½ miles of canal and then by two pipelines to the Shannon Power Station, where 10,500 kW was added to the system in 1934. After passing through Shannon Power Station the water discharges into the Waddamana canals to be used again at the Waddamana Power Stations.

In 1933, it was decided to proceed with the Tarraleah Power Development. In this scheme, the waters of the River Derwent are picked up near Butler's Gorge by a canal and conveyed 14 miles to the pipeline forebay 982 feet above the power station on the Nive River where three 15,000 kW generators were placed in service in 1938. Shortly afterwards two more 15,000 kW units were added and a sixth machine installed in 1951 brought the total installed capacity at Tarraleah Power Station to 90,000 kW. Storage is provided at Lake St. Clair and at Lake King William, an artificial lake created by the 200-ft. high Clark Dam across the Derwent at Butler's Gorge. In the Butler's Gorge Power Station at the foot of the dam, a single 12,200 kW generator was installed in 1951. To increase the security of the system and to permit variable seasonal loading of Tarraleah station, a second canal from Clark Dam to Tarraleah was completed in 1955.

Early in 1939, it was decided to make full use of the Great Lake storage by increasing the peak capacity at Waddamana. War conditions impeded progress, but by 1945 two 12,000 kW generators had been installed in a new power station, Waddamana "B", adjacent to the original station Waddamana "A". A third unit installed in 1946 and a fourth in 1949 brought the total to 48,000 kW. To enable a full peak capacity to be maintained at both Waddamana stations a duplicate of the original Waddamana canal was constructed during 1947-48.

Between 1930 and 1948, the generating capacity of the system was increased by 121,500 kW but the demand for power continued to increase rapidly and it was obvious that a greatly accelerated construction programme would have to be undertaken. Construction of the Tungatinah Power Development was started in 1948 and the Trevallyn Power Development in 1949.

The Tungatinah scheme draws water from three separate catchment areas located on the Central Plateau between the Great Lake (Shannon-Waddamana) and Lake St. Clair (Butler's Gorge-Tarraleah) catchments and control of practically the whole run-off from the Central Plateau has now been effected.

The principal catchment utilized by the Tungatinah scheme is drained by the Nive River. A 120-ft. high dam at Pine Tier diverts the waters of the Nive through 6½ miles of canal system to the first of a chain of four artificial lakes, created by dams constructed across the outlets from natural marshes and linked by large open cuts. From the southernmost lake, a tunnel and then five steel pipelines lead to the five 25,000 kW generators in Tungatinah Power Station, 1,005 feet below on the Nive River just upstream from Tarraleah station on the opposite bank of the river. Power was first generated at Tungatinah in mid-1953 with a capacity of 125,000 kW. Water from the smaller Clarence River catchment is brought into one of the lakes in the Tungatinah system by means of a woodstave pipeline 5½ miles in length and the third catchment area utilized is the Lake Echo-Dee River catchment. Regulation of this catchment has been achieved by construction of a dam at Lake Echo to provide the main storage reservoir for the Tungatinah scheme, construction of the Lake Echo Power Station (one 32,400 kW generator) to utilize 568 feet of the difference in level between Lake Echo and Dee Lagoon, and the diversion of water from Dee Lagoon through 2 miles of tunnel to the main Tungatinah system.

The Trevallyn Power Development, the first constructed by the Commission outside the Central Plateau region, was undertaken primarily to meet the requirements of the aluminium industry. The waters of the South Esk River are diverted through 2 miles of tunnel and pipeline to a power station on the Tamar River near Launceston. Three 20,000 kW generators were installed in mid-1955 and a fourth unit has since brought the total capacity of Trevallyn Power Station to 80,000 kW.

(ii) *New Capacity.* The Hydro-Electric Commission is engaged in a progressive construction programme comprising the completion of the Wayatinah "A" project and the construction of the Catagunya and the Great Lake Power Developments. Since 1948, the generating capacity of the system has been increased by 312,850 kW to a total of 485,350 kW and present construction is planned to bring this total to 917,000 kW by 1966. There will still remain very considerable resources for future development as it is considered that at least 2,400,000 kW can be economically developed.

The Wayatinah Power Development, now nearing completion, will comprise two power stations and headworks to utilize water which is, in the main, already regulated and which has been used several times. The volume of water available is much larger and the head smaller than in the case of other major stations. All the water which has passed through Tarraleah or Tungatinah stations will be diverted, by a weir across the Nive River below Tarraleah, through 4 miles of tunnel and then steel pipes to Wayatinah "A" Power Station lower down on the Nive River where 83,700 kW will be installed by 1960.

A dam across the River Derwent, just below its junction with the Nive, has created a small lake into which will flow all the water from Wayatinah "A" plus water collected by the Derwent below Clark Dam. One mile of tunnel and one mile of pipeline will lead the water to Wayatinah "B" Power Station on the Derwent three-quarters of a mile below its junction with the Florentine River. The lower station, Wayatinah "B", was constructed first and was completed in 1957. Installed capacity is 32,250 kW.

In the Catagunya Power Development, now under construction, a pre-stressed concrete dam on the River Derwent, four miles below Wayatinah " B ", will divert the water through a flume and then steel pipes to the Catagunya Power Station on the left bank of the river about one-third of a mile downstream where 48,000 kW will be installed by 1962.

The Great Lake Power Development, now in the preliminary stages of construction, is the most recent project to be undertaken by the Commission. In this scheme, the water of the Great Lake, by its diversion in the direction of the most precipitous fall, will be used to much greater advantage than at present. Eventually reaching the South Esk River it will be used again through the generators of the Trevallyn Power Station.

The works will consist of an intake at the Great Lake, a four mile headrace tunnel through the Western Tiers, one mile of surface pipeline on the face of the Tiers, a vertical shaft leading to the power station some 500 feet underground, a two and a half mile tailrace tunnel discharging into a canal, thence through a regulating pond into a channel flowing into the Lake River, a tributary of the South Esk River.

In this development, the power will be generated by the fall of water through a vertical distance of 2,750 feet to an underground power station where generators of 300,000 kW capacity will be installed. The station will be known as Poatina Power Station. A further section of the scheme includes the provision of a dam at Arthur Lakes to increase greatly the storage of the system and a pumping station and a conduit discharging into the Great Lake so that water from this catchment will be utilized through the Poatina Power Station.

There is every indication that the demand for power in Tasmania will continue to increase. The Commission is conducting extensive surveys and investigation of other schemes with a view to further construction after the completion of the present programme.

**3. Power Usage by Secondary Industry.**—The abundant and comparatively cheap supplies of electricity and other natural resources attracted to Tasmania a number of important secondary industries for which energy costs constitute a significant proportion of the total cost of production. Some of the more important organizations and their continuous power demands when plant is operating are as follows :—Electrolytic Zinc Company of Australasia Ltd., 75,000 kW at Risdon and 4,100 kW at Rosebery; Australian Aluminium Production Commission, 34,000 kW; Australian Newsprint Mills Ltd., 22,200 kW; Associated Pulp and Paper Mills Ltd., 14,900 kW; Australian Commonwealth Carbide Company Ltd., 7,800 kW.; and Goliath Portland Cement Company Ltd., 3,350 kW.

## § 7. Commonwealth Territories.

**1. Internal Territories.**—(i) *General.* The electricity supply undertakings at Canberra in the Australian Capital Territory and at Darwin, Katherine, Tennant Creek and Alice Springs in the Northern Territory are operated by the Commonwealth Government.

(ii) *Australian Capital Territory.* Supply was first established at Canberra during 1915. The Department of the Interior owns steam stand-by plant of 2,100 kW capacity which is operated in conjunction with the New South Wales Electricity Commission's generating equipment. The major portion of the territory's power requirements are supplied in bulk from the New South Wales inter-connected system. Total population served with electricity at 30th June, 1958, was 40,600 and the total number of ultimate consumers was 12,036. The average rate of increase of demand post-war, taking 1947–48 as the base year has been 13.7 per cent. while average rate of energy increase on the same basis has been 13.9 per cent.

During the year 1957–58 there were 92,886,000 kWh of electricity purchased and maximum demand amounted to 22,320 kVA.

(iii) *Northern Territory.* At Darwin, supply was established by the Town Council in October, 1934, but later, during April, 1937, responsibility for generation and supply was transferred to the Northern Territory Administration. The power station is equipped with diesel generating plant of 6,770 kW capacity, two new 970 kW diesel sets being installed in 1955–56 and an additional 1,380 kW diesel set during 1957. At Alice Springs, the Power Station is equipped with diesel generating plant of 1,982 kW capacity, two 230 kW diesel sets being installed in 1956–57, and an additional 520 kW diesel set during 1957–58.

At Katherine, the power station is equipped with a small diesel generating plant of 450 kW capacity and the diesel station at Tennant Creek was closed down in 1957, supply for the township being purchased in bulk from Peko Mines No Liability.

The total number of ultimate consumers served was 3,777 in 1957–58.

In 1956–57, the Department of Works selected a site on the water front of Darwin for a 15,000 kW steam driven generating set. This steam station is being designed to supply Darwin and suburbs when the present diesel station has reached its maximum economical capacity. No construction work has yet been undertaken on the project, but preparation of the site is planned to be completed during 1958–59.

2. **External Territories—Papua and New Guinea.**—Responsibility for the operation and establishment of the electrical undertakings in Papua and New Guinea is vested in the Administration of the Territory of Papua and New Guinea, whose headquarters are located at Port Moresby. The Administration has set up an Electrical Undertakings Branch, whose function is to control the generation and distribution of electricity in the main towns throughout the Territory. The total generating capacity of the diesel engine driven generating sets amounts to 5,511 kW and of the hydro operated sets 3,130 kW. The generating capacity of the power plants at the main centres is—Port Moresby, diesel 2,504 kW, hydro, 3,000 kW; Rabaul, 1,320 kW; Lae, 660 kW; Madang, 410 kW; Samarai, 300 kW; Kavieng, 139 kW; Wewak, 70 kW; Lorengau, 50 kW; Goroka, hydro, 100 kW; Aiyura, hydro, 30 kW; and some 300 kW distributed among outstations where generating capacity is between 5 kW and 60 kW. The townships of Wau and Bulolo are supplied by the Bulolo Gold Dredging Co., which operates a hydro-electric plant of 5,500 kW. This power is supplied for the operation of alluvial dredges and also the plywood mill of Commonwealth New Guinea Timbers Ltd.

The number of ultimate consumers served was 4,258 in 1956–57 and 5,002 in 1957–58.

Vast hydro-electric potential exists in New Guinea and it has been estimated at 15,000,000 kW, but because of the island's location, absence of large load centres and lack of industrialization, only a small proportion could be economically developed at present.

In 1950, the Commonwealth Government joined with the British Aluminium Co. Ltd. of London to locate and develop large capacity hydro-electric schemes in New Guinea. A new company was formed, known as New Guinea Resources Prospecting Co. Ltd., with a capital of £100,000. The Commonwealth Government held 51 per cent. of the shares and had a controlling interest on the board of five members. It was recently announced that the Commonwealth Government had sold its interest to a company which has been formed by Consolidated Zinc Pty. Ltd., and the British Aluminium Co. Ltd. both of London. This company is continuing investigations into the hydro-electric potential with the object of treating bauxite, which is to be mined in the Gulf of Carpentaria.

The following hydro-electric schemes are now in operation: Port Moresby at Rouna Falls on the Laloki River. Generating sets have been established with an initial capacity of 3,000 kW, and plans are now in hand to add a further 2,500 kW.

In the next stage of development, it is proposed that the head of the Rouna Falls will be utilized, and that two 6,000 kW generators will be installed in a power house at the base of the falls. This station will be capable of expansion by the addition of a further three 6,000 kW units to a total installed capacity of 30,000 kW. With the construction of this second power station, it is proposed that a 40 foot dam will be built about a mile above the falls to regulate the river in order to provide a minimum flow of 130 cusecs.

Further regulation up to 300 cusecs by the building of a 100 foot dam at Sirinum will be necessary to supply the flow requirements of the station.

The latest estimates of the full development of this river indicate that a firm 42,500 kW is available. At Goroka a 100 kW set is now in operation and a further 100 kW set is being installed. Investigations are also in hand to ascertain the potential of the present site with the object of the installation of some 600 kW.

Adjacent streams are also being investigated. At Aigura, a 30 kW hydro-electric scheme for the Agricultural Experimental Station has been in operation since August, 1956.

*Stream gauging and other preliminary investigations for hydro-electric schemes are being carried out at Lae, Rabaul, Madang, Wewak, Lorengau and Highlands Stations.*

There are possibilities for major hydro-electric development in the following localities :—Rouna Falls (near Port Moresby), Upper Snake and Busu-Erap-Leron (near Lae), Upper Ramu (near Markham-Ramu divide—80 miles from Lae) and Hathor Gorge (on Purari River) with an estimated average power of 100,000 kW, 150,000 kW, 2 million kW, 250,000 kW, and 3 million kW respectively. These have estimated run-offs of 1,400 ; 6,000 ; 12,000 ; 1,000 ; and 75,000 cusecs respectively.

In an area of 150,000 square miles of the Eastern New Guinea mainland, the power potential has been estimated at 150 kW per square mile which compares favourably with potentials of 170 kW per square mile for Switzerland and 95 kW per square mile for Norway.

#### D. STATISTICAL SUMMARY, 1951-52 AND 1956-57.

The following table shows statistics for each State separately and for the six States combined for 1951–52 and 1956–57 and relates to :—(i) the numbers and installed capacity of central electric generating stations, (ii) the values of production and output and the

average numbers of persons employed in the generating side of the electricity supply industry and (iii) the amount of electricity generated in both years and the number of ultimate consumers of electricity in 1956-57.

For further statistics of the electricity supply industry (years 1938-39 and 1952-53 to 1956-57), see Chapter VII.—Manufacturing Industry.

## CENTRAL ELECTRIC STATIONS.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
1951-52.							
<i>Generating Stations—</i>							
Government .. No.	12	11	..	2	8	1	34
Local Authority .. "	36	33	35	13	37	..	154
Companies .. "	37	24	9	17	55	1	143
<i>Total</i> .. ..	85	68	44	32	100	2	331
<i>Installed Capacity of Generators—</i>							
Steam .. '000 kW	961	571	224	(a)	135	(a)	2,117
Hydro .. "	33	52	4	(a)	..	(a)	311
Internal combustion .. "	69	28	36	(a)	47	(a)	193
<i>Total</i> .. ..	1,063	651	264	(a)	182	(a)	2,621
Persons employed(b) No.	4,459	2,500	1,066	(a)	1,108	(a)	10,381
Value of output(c) £'000	24,243	10,603	6,059	(a)	3,774	(a)	50,270
Value of production(d) .. "	8,745	4,604	1,522	(a)	1,132	(a)	18,065
Electricity generated(e) .. "							
Million kWh	4,628	2,964	1,242	788	530	1,145	11,297
Ultimate consumers(f) No.	854,339	622,271	257,576	181,414	114,978	88,234	2,118,812
1956-57.							
<i>Generating Stations—</i>							
Government .. No.	28	17	1	7	11	6	70
Local Authority .. "	32	18	52	14	36	..	152
Companies .. "	22	18	3	20	40	3	106
<i>Total</i> .. ..	82	53	56	41	87	9	328
<i>Installed capacity of Generators—</i>							
Steam .. '000 kW	1,640	881	488	(a)	240	(a)	3,590
Hydro .. "	126	251	7	(a)	2	(a)	882
Internal combustion .. "	100	31	35	(a)	53	(a)	233
<i>Total</i> .. ..	1,866	1,163	530	(a)	295	(a)	4,705
Persons employed(b) No.	5,490	3,185	1,540	(a)	971	(a)	12,473
Value of output(c) £'000	41,848	24,942	10,999	(a)	6,646	(a)	94,948
Value of production(d) .. "	23,570	13,825	4,129	(a)	2,916	(a)	50,722
Electricity generated (e) .. "							
Million kWh	7,008	5,037	1,937	1,315	782	2,210	18,289
Ultimate consumers(f) No.	1,031,452	761,806	350,155	252,600	139,417	108,392	2,643,822

(a) Not available for publication; included in the total for Australia. (b) Average employment in generating station, over whole year, including working proprietors. (c) Value, at generating station, of electricity produced plus certain earnings. (d) Value added in the process of generation. (e) Total generated including that generated by factories for their own use. (f) Approximate figures supplied by the electricity authority in each State. An "ultimate consumer" is a person, business, undertaking, etc., that has contracted to receive electric power from a public or private organization supplying this service. The number of ultimate consumers is not identical with the number of persons served with electricity because one ultimate consumer may represent three or four persons, e.g., in a household.

## CHAPTER VIII.

## WATER CONSERVATION AND IRRIGATION.

## A. RESOURCES, UTILIZATION AND NATIONAL AND INTERSTATE ASPECTS.

## § 1. Introduction.

Official Year Book No. 37, pp. 1096-1141, contained a special article "The Conservation and Use of Water in Australia" prepared by Mr. Ulrich Ellis of Canberra. In subsequent issues, much of Mr. Ellis's article of a statistical nature has been advanced, as has the general information on the more important developments in this field but, for details of general, descriptive and historical matter, reference should be made to the original article. Appended to the special article (pp. 1140-41) was a bibliography of selected books, reports, papers, etc., dealing with the development of the water resources of Australia and their conservation.

For further details on geographical and climatic features determining the Australian water pattern, reference should be made to Chapter II.—Physiography; on water supply and sewerage in metropolitan areas, cities and towns to Chapter XIX.—Local Government; and on the generation of hydro-electric power to Chapter VII.—Electric Power Generation and Distribution, of this issue.

A series of maps showing the location of major dams and reservoirs and the various irrigation schemes operating in each of the States may be found on pages 257-263 of this Year Book and a map showing the extent of known artesian basins throughout Australia is shown on page 255.

## § 2. Water Resources and their Utilization.

1. **Surface Supplies.**—Though river gaugings have been recorded over considerable periods in some parts of Australia, records elsewhere are intermittent, of short duration, or non-existent. At present, therefore, it is impossible to estimate, with any degree of reliability, the total average annual flow of Australian streams, but it would probably amount to only a small figure in comparison with the flow of rivers in other continents, some examples of which, expressed as mean annual discharges in millions of acre feet, are: Nile, 72; Danube, 228; Amazon, 1,780; Volga, 148; Mississippi, 474; and the ten main rivers of the United States of America, 900 (in the aggregate).

2. **Major Dams and Reservoirs.**—The table below lists existing major dams and reservoirs, together with those under construction and those projected as at June, 1958.

## MAJOR DAMS AND RESERVOIRS IN AUSTRALIA.

Name.	Location.	Capacity (Acre feet).	Height of Wall (Feet)	Remarks.
EXISTING DAMS AND RESERVOIRS.				
Adaminaby ..	Eucumbene River, New South Wales	3,500,000	390	Part of Snowy Mountains Hydro-electric Scheme.
Eildon .. ..	Upper Goulburn River, Victoria	2,750,000	250	Earthen embankment 3,300 feet long. Storage for irrigation and for the generation of electricity.
Hume .. ..	Murray River near Albury	1,452,000	140	Part of Murray River Scheme—storage for domestic, stock and irrigation purposes. Being increased to 2,500,000 acre feet. Hydro-electric power also developed.
Miena .. ..	Great Lake, Tasmania	(a)948,500	40	Regulates water to Waddamana hydro-electric power station.
Burrinjuck ..	Murrumbidgee River, New South Wales	837,000	264	Storage for irrigation and production of hydro-electric power.
Somerset .. ..	Stanley River, Queensland	735,000	173	Brisbane-Ipswich water supply, flood mitigation and small hydro-electric power station.
Lake Victoria ..	Murray River near South Australian border, in New South Wales	551,700	..	Natural storage for irrigation in South Australia.

(a) Useful storage only.

MAJOR DAMS AND RESERVOIRS IN AUSTRALIA—*continued.*

Name.	Location.	Capacity (Acre feet).	Height of Wall (Feet).	Remarks.
<i>EXISTING DAMS AND RESERVOIRS—continued.</i>				
Lake Echo ..	Lake Echo, Tas- mania	(a)412,200	60	Storage for Lake Echo and Tun- gainah hydro-electric power stations.
Waranga ..	Goulburn River, Victoria	333,400	..	Earthen embankment, 23,800 feet long. Irrigation storage.
Wyangala ..	Lachlan River, New South Wales	303,900	190	Storage for domestic, stock and irrigation purposes and for generation of hydro-electric power.
Glenbawn ..	Hunter River, near Scone, New South Wales	293,000	251	Part of Hunter Valley conserva- tion work.
Rocklands ..	Glenelg River, Vic- toria	272,000	..	Part of Wimmera-Mallee domes- tic and stock water supply system.
Clark ..	Derwent River, Tas- mania	(a)253,400	200	Serves Tarraleah hydro-electric power station.
Avon ..	Avon River, New South Wales	173,800	232	Part of Sydney water supply.
Glenmaggie ..	Gippsland, Victoria	154,300	100	Storage for irrigation.
Lake St. Clair ..	Central Highlands, Tasmania	(a)154,200	..	Improved natural storage for Tarraleah hydro-electric power station.
Lake Brewster ..	Lachlan River, near Hillston, New South Wales	123,900	..	Storage of rural water supplies for the lower Lachlan.
Cairn Curran ..	Loddon River, Vic- toria	120,600	..	Storage for irrigation.
Upper Yarra ..	Yarra River, Victoria	110,000	270	For Melbourne water supply.

## DAMS AND RESERVOIRS UNDER CONSTRUCTION.

Menindee Lakes Pro- ject	Darling River, near Menindee, New Wales	2,000,000	..	Part of Darling River water con- servation scheme.
Warragamba ..	Warragamba River, New South Wales	1,694,900	379	For Sydney water supply. Also provides for generation of hydro-electricity and flood mitigation.
Burrendong ..	Macquarie River, near Wellington, New South Wales	914,000	193	For rural water supplies.
Keepit ..	Namoi River, near Gunnedah, New Wales	345,000	176	For rural water supplies.
Tinaroo Falls ..	Barron River, North Queensland	330,000	133	For irrigation purposes in the Mareeba-Dimbulah area.
Tantangara ..	Murrumbidgee River, New South Wales	(a)193,000	148	Part of Snowy Mountains Hydro- electric Scheme.
Wellington ..	Collie River, Western Australia	150,000	110	Existing dam is being enlarged for supply of water to irri- gation districts and to agri- cultural areas and towns.
Koombooloomba ..	Tully River, North Queensland	146,000	123	For hydro-electric and possibly irrigation purposes.

## DAMS AND RESERVOIRS PROJECTED.

Burdekin Falls ..	Burdekin River, North Queensland	6,584,000	150	For generation of hydro-electric power, irrigation and flood mitigation.
Jindabyne ..	Snowy River, near South Wales	1,100,000	274	Part of Snowy Mountains Hydro- electric Scheme.
Blowering ..	Tumut River, New South Wales	800,000	300	Part of Snowy diversion scheme.
Warkworth ..	Wollombi Brook (Hunter Valley),	400,000	100	A flood mitigation dam for the Hunter Valley.
Arthur Lakes ..	Source of Lake River near Great Lake, Tasmania	(a)339,000	50	Part of Great Lake hydro-electric power development.

(a) Useful storage only.

3. Irrigation.—(i) *History.* For some brief remarks on the history of irrigation in Australia referring to the efforts of the Chaffey brothers and to the Victorian Irrigation Act in 1886 see issues of the Official Year Book prior to No. 39. Trends in irrigation practice in more recent years were described in Official Year Book No. 37, page 1009.

(ii) *Extent and Nature of Irrigated Culture.* About half of Australia's irrigated acreage is in Victoria, and about two-thirds is situated along the Murray and its tributaries (including the Murrumbidgee) in the three States of New South Wales, Victoria and South Australia. In those areas served by the Murray and its tributaries, irrigation water is used extensively for vines, orchards, pastures, fodders, and for domestic and stock purposes. Approximately half of Queensland's irrigated acreage is devoted to sugar cane. Western Australia's small irrigated acreage is confined to areas in the south-west where vegetables, orchards, fodders, and pastures are served. Large scale irrigation schemes have not been developed in Tasmania or the Northern Territory although reference is made on page 278 to investigations at present being carried out in the Northern Territory to determine the availability of irrigation water for rice production.

The following table shows the area of land irrigated in each State during the years 1953-54 to 1957-58 :—

AREA OF LAND UNDER IRRIGATED CULTURE.

(Acres.)

Season.	N.S.W. (a)	Vic. (b)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1953-54 ..	540,243	821,025	146,282	62,062	34,247	9,412	..	800	1,614,071
1954-55 ..	616,264	863,563	139,414	69,452	36,130	13,761	151	791	1,739,526
1955-56 ..	379,611	634,334	136,019	70,987	37,164	11,499	225	774	1,270,613
1956-57 ..	525,236	855,182	121,672	66,118	38,567	12,110	168	885	1,619,938
1957-58 ..	695,365	1,001,800	160,345	80,853	41,319	15,321	(c)127	1,396	1,996,526

(a) Source : Water Conservation and Irrigation Commission. (b) Source : State Rivers and Water Supply Commission. (c) Incomplete—see notes to following table.

The next table shows the area of land irrigated in each State during 1957-58 according to the nature of irrigated culture.

AREA OF LAND UNDER IRRIGATED CULTURE, 1957-58.

(Acres.)

Crop.	N.S.W. (a)	Vic. (b)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Rice ..	46,774	..	..	..	..	..	(c)	..	46,774
Vegetables ..	17,724	19,816	28,187	11,673	8,417	1,289	84	183	87,373
Fruit ..	21,300	32,802	4,585	19,578	5,794	1,833	38	24	169,331
Vineyards ..	13,076	44,283	..	25,443	575	..	..	..	..
Sugar-cane ..	(d)	..	69,980	..	..	..	..	..	69,980
Hops ..	..	(d)	..	..	..	1,381	..	..	1,381
Cotton ..	..	..	640	..	..	..	..	..	640
Other Crops (including Fodder and Fallow land)	196,980	102,963	(e)47,004	6,100	2,205	1,502	5	760	357,519
<b>Total, Crops</b>	<b>295,854</b>	<b>199,854</b>	<b>150,396</b>	<b>62,794</b>	<b>16,991</b>	<b>6,005</b>	<b>127</b>	<b>967</b>	<b>732,998</b>
Pastures ..	399,511	801,936	9,949	f 18,059	24,328	9,316	..	429	1,263,528
<b>Total</b>	<b>695,365</b>	<b>1,001,800</b>	<b>160,345</b>	<b>80,853</b>	<b>41,319</b>	<b>15,321</b>	<b>(g) 127</b>	<b>1,396</b>	<b>1,996,526</b>

(a) Source : Water Conservation and Irrigation Commission. (b) Source : State Rivers and Water Supply Commission. (c) Not available for publication. (d) Included in Other Crops. (e) Includes Tobacco, 6,881 acres. (f) Includes lucerne for pasture. (g) Incomplete.

(iii) *Research.* Comprehensive programmes of research and investigation are being pursued by State water and agricultural authorities and the Commonwealth Scientific and Industrial Research Organization, often in collaboration. Special attention is being given to the following:—high water tables due to the application of water; surface accumulation of salt and other soil changes associated with irrigation; methods of applying water efficiently; increasing density of stock on irrigated pastures which leads to the spread of such diseases as foot rot and fluke in sheep, and mastitis and contagious abortion in cattle; growth problems affecting plants and trees; the prevention of evaporation from water storages; and the potability of saline waters for stock.

The Commonwealth Scientific and Industrial Research Organization maintains the following research stations:—Merbein (Victoria)—horticultural problems, particularly of the dried vine fruits industry; Griffith (New South Wales)—the influence of irrigation on plant life (using horticultural trees as test plants), irrigation methods, land drainage and soil structure; Deniliquin (New South Wales)—pastures; and the Kimberley Research Station (Western Australia)—tropical crops and pastures. In the maintenance of Merbein and Griffith Stations, the Commonwealth is assisted, financially and otherwise, by the New South Wales Water Conservation and Irrigation Commission, by the Dried Fruits Export Control Board and by private organizations.

The Soils Division of the Organization has made detailed surveys of more than a million acres since 1927, with less detailed reconnaissance surveys over many millions of acres. The Division works closely with State authorities. The keynote of soil investigations is relationship between soil and land use, and there is an increasing tendency to seek such surveys before irrigation districts are established. Research is also conducted in the field of water percolation in relation to soil structure.

The Irrigation Research and Extension Committee plays an important part in the agricultural activity of the Murrumbidgee Irrigation Areas. It is representative of the State Department of Agriculture, the Commonwealth Scientific and Industrial Research Organization, the Rural Bank of New South Wales, the Soil Conservation Service of New South Wales and certain farmers' organizations (including Extension Groups). Finance is provided by these authorities on an agreed basis. The objectives are:—to enable the agricultural extension services to the farmers in the defined sub-region to be continued and developed; to provide a system for advising on local agricultural policy and organization; to provide means for farmer opinion to have due weight in the consideration of regional agricultural administration and policy; to achieve a unified approach to sub-regional extension in all branches of agriculture; to advise on the research needs of the sub-region and the co-ordination of the agricultural research of the various rural institutions working therein; to achieve close liaison between research and extension; and to conduct research in extension methods.

**4. Preservation of Catchments.**—Since water conservation commences on the catchments, it is becoming increasingly recognized that anything which interferes with catchment efficiency affects the quantity of water available for all purposes. Active steps are being taken to counteract soil erosion, to conserve soil generally, and to minimize the effects of floods, overstocking, bush fires, and the destruction of vegetative cover. All States and the Commonwealth have initiated forestry policies which provide for reafforestation and the preservation of catchments. In recent years, efforts to counteract soil erosion have been intensified and there is some evidence of a more unified approach to catchment, water, forestry, and land use factors regarded as parts of a single problem.

**5. Sub-surface Supplies.**—(i) *General.* While a more or less complete general picture of the available and potential surface water resources exists, much remains to be done with regard to the location and development of sub-surface supplies (artesian, sub-artesian and ground water), in view of their importance as the basis of settlement over large areas of Australia.

The extent of the artesian basins—particularly the Great Artesian Basin—has been fairly accurately determined, while the use of sub-artesian supplies is extensive and more development is possible. The shallower ground-water supplies, however, particularly along alluvial valleys and coastal sandbed areas, have not been investigated or developed to any degree, except in a few localities.

(ii) *Artesian and Sub-artesian Supplies.* Pressure water, variable in quantity and quality, either artesian or sub-artesian, is obtainable in many parts of Australia, the various artesian basins extending over approximately one-third of the continent. A map of Australia showing the extent of the known artesian basins appears on page 255 of this Year Book.

The Great Artesian Basin, the most extensive in the world, underlies an area of approximately 670,000 square miles, comprising about 430,000 in Queensland, 80,000 in New South Wales, 120,000 in South Australia and 40,000 in the Northern Territory. Of the numerous defined major and minor water-bearing basins in Australia, the following are the principal :—

PRINCIPAL WATER-BEARING BASINS : AUSTRALIA.

Name.	State.	Geological Age of Chief Aquifers.	Approximate Area.	Depth to Pressure Water.
			Square Miles.	Feet.
Great Artesian ..	Queensland, New South Wales, South Australia and Northern Territory	Mesozoic .. ..	670,000	Up to 7,000
Desert and Fitzroy Murray ..	Western Australia, Victoria, New South Wales and South Australia	Mesozoic-Palaeozoic	160,000	100 to 1,500
		Miocene-Oligocene ..	107,000	100 to 900
Eucla .. ..	Western Australia, South Australia	Pliocene-Miocene ..	68,000	300 to 2,000
Barkly .. ..	Northern Territory, Queensland	Cretaceous, Cambrian and Upper Precambrian	57,000	150 to 1,000
North-west ..	Western Australia	Cretaceous, Permian ..	40,000	230 to 4,000
South-west ..	Western Australia	Recent, Jurassic ..	10,000	200 to 2,500
Pirie-Torrens ..	South Australia ..	Recent, Pleistocene ..	4,000	Up to 600
East Gippsland ..	Victoria .. ..	Pleistocene-Oligocene	2,500	200 to 1,800
Adelaide ..	South Australia ..	Recent, Oligocene ..	1,100	10 to 850
Basins of Ord-Victoria Region	Northern Territory, Western Australia	Mainly Cambrian and Permian	Unknown	Unknown

More than 3,000 artesian bores have been constructed within the Great Artesian Basin, while the daily free discharge from all bores continuing to flow in Australia has been stated to exceed 350 million gallons, of which the loss by evaporation and seepage has been estimated at more than 90 per cent. Sub-artesian bores and wells throughout Australia number more than 200,000.

Artesian water generally is good stock water, but it is unsuitable for plant life, while in certain areas sub-artesian waters are suitable for all uses including irrigation. In some districts a considerable amount of irrigation is carried out from shallow ground-water supplies.

In common with other countries possessing artesian supplies, Australia has been faced with the problem of flow diminution. It was recognized early that flows were diminishing as more bores were drilled, but it is now considered that while many of the bores will ultimately cease to flow, many will not cease, but will assume a perpetually steady rate of flow, corresponding with the average intake of water from rainfall absorbed by sandstone outcrops. Diminution in flows from artesian bores has emphasized the need to eliminate wastage as much as possible, and investigations have been made regarding wasteful methods of distribution of artesian water by open channels or "bore drains" and the careless use of water. (For greater detail on this subject see Official Year Book No. 37, pp. 1103-4.)

(iii) *Ground Water.* Ground water supplies are used in various parts of Australia for industry, irrigation, stock and domestic purposes. Two of the most important of these supplies are in New South Wales. The Hunter District Water Board pumps 15 million gallons a day for general use from the Tomago coastal sands near Newcastle and at Botany, Sydney, private industry pumps 5 million gallons a day for its own use from similar sands.

Recent exploration of the coastal sands north of the Tomago Sands has revealed a further potential production of 25 million gallons a day.

### § 3. National and Interstate Aspects.

1. *General.*—As the Commonwealth Constitution makes special reference to water problems, both the Commonwealth and the State Governments have an interest in the control and conservation of water. The main responsibility for control of water resources resides in the individual State governments, but as political boundaries sometimes intersect river valleys and catchments, co-operation between governments has been necessary to develop resources in certain cases. Specific examples of Commonwealth-State and interstate co-operation and approach are given in the following sections.

In the Report on Irrigation, Water Conservation and Land Drainage presented to the Commonwealth Government by the Rural Reconstruction Commission in 1945, national aspects of water conservation and use were emphasized. The report recommended that to obviate lack of co-ordination, an all-Australian plan, having the assent of the various governments be adopted, and that the Commonwealth should endeavour to promote interstate co-operation and co-ordinated development generally.

In 1946, a conference between the Commonwealth and States agreed to revive the Irrigation Production Advisory Committee first established under the authority of the Australian Agricultural Council in 1938. Its functions are :—(a) to prepare for the consideration of the Australian Agricultural Council or any Committee of Ministers appointed by the Council, conclusions formed from investigations to be carried out by Commonwealth and State Officers into the various agricultural industries which it is possible to develop on irrigated lands ; (b) to undertake long-term co-ordination of land utilization in irrigable areas served by the River Murray and its tributaries, involving co-ordination of all available lands and the carrying out of such supplementary investigations as may prove necessary.

2. *Murray River Scheme.*—(i) *General.* The Murray River and its tributaries form the largest river system in Australia. The catchment is approximately 414,000 square miles, or one-seventh of the area of the Australian continent, comprising five-sixths of New South Wales, over one-half of Victoria, one-sixth of Queensland and one-fortieth of South Australia. The Murray proper is 1,600 miles long. Its main tributaries are the Murrumbidgee (980 miles), the Darling (1,700 miles), and the Goulburn (280 miles). The average annual flow of each of the chief contributory streams is as follows :—Upper Murray, including the Mitta Mitta and Kiewa Rivers, 3,506,000 acre feet ; Murrumbidgee River, 2,280,000 acre feet ; Goulburn River (including Broken River), 2,502,000 acre feet ; Darling River, 2,224,000 acre feet ; and Ovens River, 1,169,000 acre feet. Irrigated production in the River Murray basin is mainly in the form of wine, dried fruits, fresh fruits, rice, vegetables, dairy produce, wool, fat lambs, poultry, eggs and pigs.

For a brief summary of the historical events leading up to the River Murray Agreement (1915) by the Governments of the Commonwealth, New South Wales, Victoria, and South Australia, see issues of the Year Book prior to No. 39. The Agreement provided for the construction of works, the allocation of the water between the three States, and the appointment of a Commission to implement the Agreement. The Commission comprises four Commissioners, representing the Commonwealth and the three States respectively. The Commonwealth representative presides.

(ii) *River Murray Waters Agreement.* Under the Agreement, construction works are carried out by the States (who are also responsible for maintenance) subject to the approval and direction of the Commission. The Agreement provides that the minimum quantity of water to be allowed to pass for supply to South Australia in each year shall be sufficient to fill Lake Victoria storage once, and with the aid of water returned from Lake Victoria, to maintain certain specified flows in the lower river varying from 47,000 acre feet per month in the winter months to 134,000 acre feet per month in the four summer months of maximum demand—the total amounting to 1,254,000 acre feet over twelve months. These flows are to meet domestic and stock requirements in South Australia, losses of water in lockages and evaporation losses other than in the lakes at the Murray mouth, together with 603,000 acre feet per annum for diversion from the Murray for irrigation in South Australia. The flow at Albury is shared equally by New South Wales and Victoria, and each of these States has full control of its tributaries below Albury, subject in each case to the fulfilment of the South Australian allocation. For a brief outline of the operation of the Agreement prior to 1949 see Official Year Book No. 40, page 1065, and earlier issues.

At a conference of Ministers held in July, 1949, to consider the diversion of the Snowy River, it was decided that, by diversion of streams in the Snowy Mountains area, an average of approximately 440,000 acre feet per annum would be added to the Murray River (see para. 4, Snowy Mountains Hydro-electric Scheme, p. 245) and that a storage of not less than 1,500,000 acre feet should be provided in order to give additional regulation of the Murray River itself as well as to provide for regulation of the diverted waters. Hydro-electric potentialities would also affect the size of the storage.

The River Murray Commission investigated the position and found that an increase in capacity of 500,000 acre feet in storage on the Upper Murray River above Albury was the maximum that was economically justifiable for the regulation for irrigation purposes of the waters of the Upper Murray River and of waters added from the Snowy River. The Commission agreed that this increase could best be provided by increasing the size of the Hume Reservoir from its previously designed capacity of 2,000,000 acre feet to 2,500,000 acre feet, but if additional storages for hydro-electric purposes become justified in the future further increases would best be provided at some other site. It subsequently recommended to the contracting Governments that the River Murray Waters Agreement be amended to provide for this enlargement of the Hume Reservoir to 2,500,000 acre feet. A conference of Ministers considered the recommendation in July, 1954, and agreed to the enlargement. In addition, it was agreed that the Commission should be given power to construct regulators and to carry out such other work on the River Murray between Tocumwal and Echuca as it considered necessary to reduce the losses from the regulated flow in that stretch of the river. The amended Agreement was ratified in the Parliaments of the Commonwealth and the three States and was proclaimed on 7th April, 1955.

The estimated quantity (in acre feet) of water diverted during 1957–58 from the Murray and its tributaries for irrigation and other purposes under the River Murray Agreement was as follows:—New South Wales, 1,808,000; Victoria, 2,429,000; South Australia, 247,000; a total of 4,484,000 acre feet.

(iii) *River Murray Works.* One of the major works of the Murray River Scheme is the Hume Reservoir, situated just below the junction of the Murray and Mitta Mitta Rivers, 10 miles above Albury, forming a lake of 33,000 acres. The design comprises a mass concrete spillway and outlet works extending 1,000 feet and an earthen embankment 110 feet high extending for 4,000 feet across the river flats. The length of the total structure is approximately one mile. Work is nearly completed on the enlargement of the reservoir to its approved capacity of 2,500,000 acre feet. The fixed spillway was completed to its final level in May, 1957, and installation of flood gates to raise the level a further 24 feet was completed in September, 1958.

The Yarrawonga Diversion Weir was completed in 1939 to raise the river level so that water could be diverted by gravitation into main channels constructed on either side of the river. Between the Yarrawonga Weir and the Murray mouth, thirteen weirs and locks have been built. Two flood diversion weirs have been constructed on the Murrumbidgee—one between Hay and the Lachlan Junction and the other below the Lachlan Junction.

The Mulwala Canal, served by the Yarrowonga Weir, has an off-take capacity of 2,500 cubic feet a second, and will serve 1,500,000 acres of land in New South Wales. The Yarrowonga Channel, on the Victorian side, has an off-take capacity of 1,250 cubic feet a second, and is designed to serve 270,000 acres. Only a portion of both these areas will be irrigated.

Adjoining the river in New South Wales and 35 miles from the Murray-Darling Junction, Lake Victoria storage, with a capacity of 551,700 acre feet and a surface area of 27,670 acres, was completed in 1928. The water released from Lake Victoria is used by the South Australian settlements. Work has recently been completed on the enlargement of the inlet channel to Lake Victoria to permit greater diversion of periodical flood flows of short duration.

Five barrages across channels near the Murray River mouth connecting Lake Alexandrina with the sea were completed in 1940 to prevent ingress of salt water to Lakes Alexandrina and Albert and to the lower river, thereby increasing the productivity of adjacent lands. The structures maintain a sufficiently high level for 50 miles up river to permit watering by gravitation of a considerable area of reclaimed river flats. The total distance across the barrages and intervening islands is 15 miles.

In addition to the works carried out under the auspices of the Commission, the separate States have constructed thousands of miles of distribution channels and have provided a number of storages on the tributaries, thereby contributing very materially to the large amount of irrigation development in the Murray Basin. The total capacities of such main storages are : New South Wales—Burrinjuck (Murrumbidgee), 837,000 acre feet ; Wyangala (Lachlan), 303,900 acre feet ; Victoria—Eildon (Goulburn), 2,750,000 acre feet ; Waranga (Goulburn), 333,400 acre feet. More details of these and other State works on Murray tributaries will be found in the sections dealing with State systems. No storages exist on the Murray in South Australia.

**3. New South Wales-Queensland Border Rivers Agreement.**—The New South Wales-Queensland Border Rivers Agreement came into effect on 1st July, 1947. The Agreement provides for the construction of certain works on parts of those portions of the Severn, Dumaresq, Macintyre and Barwon Rivers which constitute part of the boundary between New South Wales and Queensland, for the furtherance of water conservation, water supply and irrigation in those States.

The works to be constructed comprise a dam on the Dumaresq River at a site to be selected by the Commission to give a storage basin with a capacity as large as is reasonably practicable and not less than six nor more than twelve weirs as may be found necessary to meet the requirements of irrigation along the rivers. Provision is also made for the construction of not more than four regulators in the effluents from the barrier rivers and for the taking over of the existing weir in the Macintyre River at Goondiwindi and the existing weir in the Barwon River at Mungindi. The costs of these works and of administration are to be borne by the States in equal shares. The agreement further provides that the water discharged from the Dumaresq storage, whether by regulated or unregulated flow, shall be available to the two States in equal shares.

The Water Conservation and Irrigation Commission of New South Wales, which is the constructing authority for the dam, carried out investigations of several dam sites on the Dumaresq River near Mingoola Station Homestead which is approximately 39 miles from Tenterfield. Foundation drilling supplemented by a geophysical survey carried out by the Commonwealth Bureau of Mineral Resources disclosed unfavourable foundation conditions at all sites, the depth of alluvium overlying sound rock exceeding 150 feet in all cases. In an endeavour to obtain more economical storages, investigations were extended to tributary streams and superficially suitable sites have been located on Pike Creek and the Mole River. A geophysical survey was made at each of these sites and preliminary comparative estimates prepared to determine the relative economy of providing one large storage at Mingoola or two smaller storages on the tributaries. Exploratory drilling of the tributary sites is now in progress.

The Irrigation and Water Supply Commission of Queensland is the constructing authority for the new weirs and regulators. The construction of Bonshaw and Cunningham Weirs on the Dumaresq River was completed in January, 1953, and June, 1954, respectively.

Investigations are proceeding and designs are being prepared for a weir and regulator on the Barwon River at the offtake of the Boomi River. The construction of a low level weir to establish a pumping pool at Glenarbon on the Dumaresq River was well advanced at 30th June, 1958. The existing Goondiwindi and Mungindi Weirs are being maintained, operated and controlled by the Queensland Irrigation and Water Supply Commission. Until a dam has been constructed, it is unlikely that any weirs, other than those referred to above, will be required.

The catchments for the border streams (2,000 square miles) extend to the granite areas in the vicinity of Tenterfield (New South Wales) and Stanthorpe (Queensland) and elevation rises to 3,000 feet. Average rainfall is 30 inches. The catchments and the areas suitable for irrigation are approximately equal in each State. Climatic conditions are such that it is necessary to supplement rainfall from April to October by irrigation to stabilize and increase production. The capacity of the area to grow lucerne and tobacco under irrigation has already been demonstrated. Other possible development of the area includes irrigation of cotton, root crops, cereals, and citrus fruit, and expansion of the fat stock industry.

**4. Snowy Mountains Hydro-electric Scheme.\*—(i) General.** Following a comprehensive investigation into both the water and power potential of the Snowy River waters by a Technical Committee representative of the Commonwealth and the States of New South Wales and Victoria in 1947 and 1948, and the submission by the committee of reports in 1948 and 1949, the Commonwealth Parliament in July, 1949, passed the Snowy Mountains Hydro-electric Power Act setting up an Authority to implement the proposals agreed upon.

The basis of the proposals is to impound the Snowy River waters at high elevations and, by diverting them into tunnels passing under the Alps, to use their potential power for the generation of electricity and then to discharge them into the Murray and Murrumbidgee River systems for use in the irrigation areas.

The scheme will be constructed in two parts, the first being known as the Snowy-Murray Development where the water is to be diverted by tunnel from a large dam across the Snowy River at Jindabyne to the Swampy Plain River in the Murray Valley, and the second as the Tumut Development, in which water will be diverted by tunnel from a dam at Adaminaby on the Eucumbene River, a tributary of the Snowy, to the Tumut River, a tributary of the Murrumbidgee. The whole scheme will involve the construction of seven major dams (with a total storage capacity of approximately 7 million acre feet), fifteen power stations, more than 80 miles of large diameter tunnels, and over 330 miles of racelines at high elevations.

Latest estimates indicate that the total cost will be approximately £419 million. The scheme is the greatest engineering and developmental work ever undertaken in Australia and one of the major engineering projects of the world.

(ii) *Snowy Mountains Hydro-electric Power Act 1949.* The Snowy Mountains Hydro-electric Authority is constituted by a Commissioner, who is assisted by two Associate Commissioners. The functions of the Authority are defined in the Act as follows:—(a) to provide hydro-electric works in the Snowy Mountains area for the generation of electricity and (b) to supply or permit the supply of electricity generated in those works to the Commonwealth for purposes of the Commonwealth and for consumption in the Australian Capital Territory and to the Electricity Commission of New South Wales and the State Electricity Commission of Victoria. The general powers of the Authority as defined in the Act are as follows:—For the purpose of performing its functions the Authority shall have power to construct, maintain, operate, protect, manage and control works—(a) for the collection, diversion and storage of water in the Snowy Mountains Area; (b) for the generation of electricity in that area; (c) for the transmission of electricity generated by the Authority; and (d) incidental or related to the construction, maintenance, operation, protection, management or control of any of the works specified above.

\* See also Chapter VII.—Electric Power Generation and Distribution, p. 214. For more detailed information see special article by the Commissioner, Snowy Mountains Hydro-electric Authority (Sir William Hudson) which appeared in Chapter XXIX.—Miscellaneous, of Official Year Book No. 42

(iii) *The Authority's Objectives and Programme.* The two basic objectives are the production of electricity and the diversion of water inland.

The first power station, at Guthega, came into service in April, 1955. Additional generating capacity is scheduled to become available progressively.

By the end of 1959, the Snowy Scheme will supply the Murrumbidgee River with approximately 300,000 acre feet per annum of additional water and by 1962 this amount will have increased to 500,000 acre feet per annum. Ultimately the scheme will provide approximately 1,818,000 acre feet per annum of additional regulated water of which 1,020,000 acre feet will go to the Murrumbidgee and 798,000 acre feet per annum to the Murray.

Construction of the Adaminaby Dam supervised on behalf of the Authority, by the New South Wales Department of Public Works, has now been completed and water has been stored there since the closure of the diversion tunnel gates in June, 1957. Excavation of the 14 mile Eucumbene-Tumut Tunnel has been completed and concrete lining is now in progress. Construction of the 283 feet high Tumut Pond Dam is nearing completion and storage of water commenced in the latter half of 1958. The pressure tunnel leading from the dam to the T1 Power Station has been completed and installation of machines is progressing satisfactorily. The first two units, each of 80,000 kW, will come into service early in 1959, and the remaining two units later in the same year. Contracts have recently been awarded for the Tooma-Tumut Diversion, the T2 Project and the Murrumbidgee-Eucumbene Diversion.

## B. STATES AND TERRITORIES.

### § 1. Australian Local Pattern of Water Conservation and Use.

The foregoing sections deal with water conservation and irrigation in Australia generally and with national and interstate projects. The following survey indicates the local pattern of water resources and the steps taken by the State Governments to bring about their development. It will be seen that water policies in the various States tend to assume a distinctive and characteristic pattern closely allied with climatic conditions and specific local needs.

In Victoria, almost every form of water scheme is in operation. In New South Wales, major emphasis at present is on irrigation and stock development in the dry areas along the Murray and Murrumbidgee Rivers, though a substantial scheme of intensive irrigation is being conducted in the Murrumbidgee Irrigation Areas. In Queensland, up to the present, the predominant emphasis has fallen on water (mainly underground sources) for stock, and the development of small irrigation schemes in sub-humid and humid areas, especially to stabilize sugar production.

Apart from regular irrigation practices along the Murray River, South Australian authorities are vitally concerned with reticulated supplies for rural areas and towns. Western Australia has developed unique rock catchments and piped supplies for agricultural areas and towns in dry districts. Tasmanian interest appertains to hydro-electric generation almost exclusively. The Northern Territory is concerned primarily with stock supplies and the safeguarding of long stock routes.

### § 2. New South Wales.

1. *General.*—(i) *Rainfall and History.* In issue No. 37 of the Year Book (p. 1110) information on the pattern of rainfall and the history of irrigation in New South Wales preceded the description of water conservation and use in that State, but it has now been omitted. (See also Chapter II.—Physiography, p. 45 of this Year Book.)

(ii) *Administration.* The Water Conservation and Irrigation Commission of New South Wales consists of three members appointed by the Governor. The operations of the Commission cover water conservation, control of irrigation areas, establishment, operation and maintenance of works for domestic and stock water supply, irrigation districts, flood control districts, sub-soil drainage districts, constitution of water trusts, the issue of licences for private irrigation, artesian and shallow boring, assistance under the provisions of the farm water supplies scheme and river improvement works.

Under the Water Act, the right to the use and flow, and the control of water in all rivers and lakes which flow through, or past, or are situated within, the land of two or more occupiers, is vested in the Commission for the benefit of the Crown. A system of licences operates for the protection of private works of water conservation, irrigation, water supply, drainage, and prevention of inundation.

For particulars of the New South Wales-Queensland Border Rivers Agreement ratified by Acts of both States in 1947, see page 244 of this Chapter.

**2. Schemes Summarized.**—(i) *Location and Type.* The bulk of irrigated land is along the Murray and its tributary the Murrumbidgee. Smaller areas are served by the Wyangala Dam and Lake Brewster on the Lachlan, a tributary of the Murrumbidgee. None of the other rivers is regulated by large head storages, though weirs and dams have been provided for town supplies, etc., in many places, and head storages have been commenced on the Macquarie, Namoi and Hunter Rivers. Substantial use is made of artesian and sub-artesian water in pastoral areas.

New South Wales legislation provides for the constitution and control of various schemes having different characteristics and including irrigation areas, irrigation districts, water trust districts, flood control and irrigation districts and river improvement districts. There are seven irrigation areas :—The Murrumbidgee Irrigation Areas consisting of 451,251 acres served with water through a channel system stemming from the river at Berembded Weir ; the Coomealla Irrigation Area of 34,693 acres, served by pumping from the Murray ; the Curlwaa Irrigation Area of 10,549 acres, supplied from the Murray by pumping ; the Hay Irrigation Area of 6,806 acres, supplied with water pumped from the Murrumbidgee ; the Tullakool Irrigation Area of 18,006 acres supplied from the Edward River at Stevens Weir ; and the recently established Buronga (8,703 acres) and Mallee Cliffs (1,900 acres) Irrigation Areas served by pumping from the Murray. All these areas are administered by the Commission, and details of the various schemes are given in sub-section (iii) below.

(ii) *Works.* The capacities of the main storages (in acre feet) are :—

*Murray* :—Half share of Hume Reservoir, weirs and locks to Wentworth (835,420) ; Stevens Weir, Edward River (7,165).

*Murrumbidgee* :—Burrinjuck Dam (837,000) ; Berembded Weir (10,000) ; Redbank Weir (7,360) ; Maude Weir (6,740).

*Lachlan* :—Wyangala Dam (303,900) ; Lake Brewster (123,900) ; Lake Cargelligo (29,435) ; Jemalong Weir (2,200).

*Hunter* :—Glenbawn Dam (185,000 acre feet irrigation storage ; 108,000 acre feet flood mitigation storage).

Water from the Hume Reservoir is used for domestic and stock purposes, to provide bulk supplies for country towns, for the irrigation of vines, fruits and fodder in the Curlwaa and Coomealla Areas, for rice and other cereals and for pastures in the Tullakool Irrigation Area, for domestic and stock supply and irrigation in the Berriquin, Wakool and Denimein Districts, and for water trusts for domestic and stock purposes and/or irrigation.

The Wyangala Dam is 30 miles upstream from Cowra in the Central West. It has a catchment of 3,200 square miles. Water from the dam, supplemented by the unregulated flow of the Belubula River, provides for domestic and stock purposes along the full length of the river (over 700 miles) and also for irrigation by land holders operating licensed pumps. The towns of Cowra, Forbes, Condobolin, Hillston and Booligal are supplied. Balance storages at Lake Cargelligo and at Lake Brewster conserve water during periods of high flow for release as required. Water from the Lachlan, diverted at Jemalong Weir, supplies the districts of Jemalong and Wylde's Plains, serving an area of 224,556 acres. Proposals for future development include provision of a head storage on the Belubula River.

The approximate total length of channels (including main canals) constructed by the Water Conservation and Irrigation Commission in New South Wales is 2,965 miles. The approximate length of drains and escape channels is 1,056 miles, and the total length of pipe lines is approximately 68 miles, making a grand total of 4,089 miles of channels and pipe lines, etc.

(iii) *Extent of Systems and Nature of Irrigated Culture.* The following table shows the areas of the various irrigation systems and particulars of the areas under irrigated culture in New South Wales during 1957-58.

## AREAS OF SYSTEMS AND OF LAND UNDER IRRIGATED CULTURE: NEW SOUTH WALES, 1957-58.

(Acres.)

System, etc.	Total Area.	Area under Irrigated Culture.										Total.
		Rice.	Other Cereals Grown for Grain.	Lucerne. (a)	Other Fodder Crops.	Pastures.		Vineyards.	Orchards. (c)	Vegetables.	Fallow Land and Miscellaneous.	
						Sown. (b)	Natural.					
<b>Irrigation Areas—</b>												
Murrumbidgee (within the Areas)	451,251	27,041	20,602	4,191	9,798	80,321	2,713	5,114	13,616	4,220	24,003	191,619
Lands adjacent supplied under agreement .. ..	(d)	..	5	129	27	181	1,560	2	73	4	2	1,983
Coomalla .. ..	34,693	..	..	1	..	..	..	488	883	15	..	5,156
Curlew .. ..	10,549	..	..	8	53	..	..	..	1,024	5	..	1,578
Hay .. ..	6,806	..	..	48	128	1,117	16	..	..	..	..	1,309
Tullakool .. ..	18,006	951	395	30	30	6,000	216	..	..	..	260	7,882
<b>Total .. ..</b>	<b>e 521,305</b>	<b>27,992</b>	<b>21,002</b>	<b>4,407</b>	<b>10,036</b>	<b>87,619</b>	<b>4,505</b>	<b>9,861</b>	<b>15,596</b>	<b>4,244</b>	<b>24,265</b>	<b>209,527</b>
<b>Irrigation Districts—</b>												
Benerambah .. ..	112,818	5,623	6,428	1,037	3,872	25,100	1,800	..	..	189	14,635	58,684
Tabbita .. ..	10,745	309	168	130	420	3,730	..	..	..	..	737	5,494
Wah Wah .. ..	571,358	..	1,950	1,175	1,872	5,485	..	..	..	..	1,610	12,092
Berriquin .. ..	779,564	..	6,800	30,348	7,600	132,913	1,290	..	..	30	1,300	180,281
Wakool .. ..	493,730	7,004	1,200	1,800	4,800	47,240	720	..	..	..	300	63,064
Denimein .. ..	147,005	2,412	1,350	1,211	887	13,998	1,203	..	12	..	41	21,114
Jemalong and Wyld's Plains .. ..	224,556	..	2,725	6,168	..	9,194	1,398	..	..	..	2,000	21,485
Gumly .. ..	353	..	57	80	..	37	..	..	18	39	..	231
Deniboota .. ..	307,212	3,434	1,980	370	975	11,135	3,320	..	..	..	680	21,894
<b>Total .. ..</b>	<b>2,647,341</b>	<b>18,782</b>	<b>22,658</b>	<b>42,319</b>	<b>20,426</b>	<b>248,832</b>	<b>9,731</b>	<b>..</b>	<b>30</b>	<b>258</b>	<b>21,303</b>	<b>384,339</b>
<b>Flood Control Districts—</b>												
Lowbidgee .. ..	375,000	..	..	..	..	..	(f)94,118	..	..	..	..	(f)94,118
Medgun .. ..	272,800	..	..	..	..	..	(f)61,760	..	..	..	..	(f)61,760
<b>Total .. ..</b>	<b>647,800</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>f 155,878</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>f 155,878</b>
<b>Irrigation Trusts—</b>												
Pomona .. ..	1,580	..	..	..	..	..	..	770	130	..	..	900
Bringan .. ..	4,933	..	..	..	..	..	..	..	..	..	..	(d)
Bungunyah-Koraleigh .. ..	1,810	..	..	..	..	..	..	996	72	80	..	1,148
Glenview .. ..	661	..	..	..	..	..	..	..	..	..	..	(d)
Goodnight .. ..	1,167	..	..	..	..	..	..	548	41	4	10	603
Bama .. ..	3,446	..	..	..	..	..	..	..	..	..	..	(d)
<b>Total .. ..</b>	<b>13,597</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>2,314</b>	<b>243</b>	<b>84</b>	<b>10</b>	<b>(e) 2,651</b>
<b>Water Trusts—Domestic and stock supplies</b>	<b>2,914,831</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>
<b>Licensed Diversions(g)—To irrigate .. ..</b>	<b>(d)</b>	<b>..</b>	<b>..</b>	<b>19,967</b>	<b>9,750</b>	<b>43,103</b>	<b>5,721</b>	<b>901</b>	<b>5,431</b>	<b>13,138</b>	<b>(h)837</b>	<b>98,848</b>
<b>Grand Total(e) ..</b>	<b>(d)</b>	<b>46,774</b>	<b>43,660</b>	<b>66,693</b>	<b>40,212</b>	<b>379,554</b>	<b>175,835</b>	<b>13,076</b>	<b>21,300</b>	<b>17,724</b>	<b>46,415</b>	<b>i 851,243</b>

(a) Includes grazing and cutting.

(b) Perennial and annual self-seeding. Perennial amounted to 39,183 acres.

(c) Citrus and deciduous. Deciduous amounted to 6,825 acres of which 6,144 acres were in the Murrumbidgee Irrigation Area.

(d) Not available. (e) Incomplete. (f) Area irrigable; details of area actually irrigated are not available.

(g) Excludes domestic and stock supplies for which particulars are not available. (h) Tobacco.

(i) Includes Flood Control Districts; but excludes some Irrigation Trusts for which information is not available.

3. **Murrumbidgee Irrigation Areas.**—(i) *Description.* These areas comprise about a third of the State's irrigated acreage and in 1957-58, together with adjacent lands supplied under agreement, received 399,166 acre feet of the total water (1,520,842 acre feet) allocated within the State for stock, domestic supply and irrigation. They are served by the Burrinjuck Dam (capacity 837,000 acre feet), on the Murrumbidgee, 40 miles north-west of Canberra. The catchment above the dam is 5,000 square miles. The river rises on the high plateau north of Mount Kosciusko where the average annual rainfall exceeds 60 inches. Flow for the irrigation districts is supplemented by unregulated flow from the Tumut River below the dam. The dam also provides town supplies for Gundagai, Wagga, Narrandera, Hay, Balranald, and for towns served by the South-West Tablelands scheme.

Domestic and stock water and water for irrigation are supplied to the Irrigation Districts of Tabbita, Benerambah and Wah Wah and the Flood Control and Irrigation District of Lowbidgee. Flood flows are relied on to serve the Lowbidgee district and water is not released from the dam for that purpose. For the other undertakings, however, water is stored during the winter and spring freshets, fed by melting snows, and is released during the September-April irrigation season. It passes along the river channel to Berembed Weir, 240 miles westward, where it is diverted to the main canal with an off-take capacity of 1,600 cubic feet per second. The main canal has been completed to beyond Griffith, 96½ miles from the off-take. Reticulation channels aggregate approximately 869 miles and drainage channels 802 miles. In addition, approximately 390 miles of supply channels run through adjacent irrigation districts in which the water supply is operated and maintained by the Commission, but land transactions are not under its control.

The land on which the Murrumbidgee Irrigation Areas are situated originally comprised large sheep stations and was sparsely populated. Population was 12,000 in 1923, 15,000 in 1929, 20,000 at the 1947 Census and 24,000 at the 1954 Census. At the 1954 Census, the population of the Yanco District (with Leeton as the centre) was 10,000 and the population of the Mirrool Area (with Griffith as the centre) was 14,000.

(ii) *Administration.* The Water Conservation and Irrigation Commission controls land transactions and water supplies for the Murrumbidgee Irrigation Areas. Other local government services, including electricity and town water supply, are provided by Councils. Land is disposed of by the Commission under freehold or perpetual lease tenure or leased for short terms for grazing or cultivation. The area under occupation at 30th June, 1958, was 389,376 acres, including 43,215 held for short lease grazing, agriculture, etc.

(iii) *Production.* Since the inauguration of the scheme in 1912, the volume of production from the area has greatly increased. Numbers of new crops are grown while the volume of the major products of the area prior to the scheme, such as wool and livestock for slaughtering, has expanded considerably. The principal products to-day are: wool, livestock for slaughtering, rice, citrus fruits, peaches and nectarines, grapes, tomatoes, peas, beans and root vegetables.

Rice growing was initiated on the Murrumbidgee Irrigation Areas in 1924 and has since become the most important crop grown in the area. In 1957-58, the total area sown was 27,041 acres and the total quantity of water delivered for the rice crops was 163,146 acre feet. In a normal season, the water supplied for rice represents about one-half of the total delivered to the Murrumbidgee Irrigation Areas.

Co-operation is a prominent feature in the Murrumbidgee Areas. Co-operative organizations in the Mirrool section handle about 300,000 bushels of fruit per year (compared with 54,600 in 1927-28). The annual sales turnover of the Leeton cannery in recent years has exceeded £2,000,000. Settlers and government agencies co-operate extensively in all matters relating to irrigation practice.

4. **Other Irrigation Areas.**—The Curlwaa, Coomealla, Hay and Tullakool Irrigation Areas follow the same administrative pattern as the Murrumbidgee Areas—that is, land transactions are administered by the Water Conservation and Irrigation Commission which also is responsible for the operation and maintenance of works to supply water.

Curlwaa Area, on the Murray near Wentworth, consists of 10,549 acres of which 7,877 acres were occupied at 30th June, 1958. Production consists of dried vine fruits, deciduous fruits and fodder crops.

Coomealla Area, 9 miles upstream from Curlwaa, comprises 34,693 acres of which 31,199 acres were occupied at 30th June, 1958. Production consists of vine and citrus fruits. An extension of the Coomealla Irrigation Area was completed in recent years to provide irrigation farms for ex-servicemen and 100 ex-servicemen were placed on the new farms.

Tullakool Area, formerly part of the Wakool Irrigation District, comprises 18,006 acres of which 14,396 acres are occupied. Main products are fat lambs, wheat and rice.

Hay Area, on the lower Murrumbidgee, consists of 6,806 acres, of which, 6,240 acres are occupied. Production comprises dairy products, fat lambs, sheep, wool and fodders.

**5. Irrigation Districts.**—These Districts are set up under the Water Act for (a) domestic and stock water supply and (b) irrigation. They differ from water trusts in that the cost of the works is not required to be repaid over a period, but annual charges are made by the State for water supplied to landholders. The following are the districts or provisional districts constituted and the areas of land benefited :—*Murray River*—Wakool District (completed) 493,730 acres, Berriquin Provisional District (completed) 779,564 acres, Deniboota Provisional District (completed) 307,212 acres, Denimein Provisional District (completed) 147,005 acres, Jernargo Provisional District (certain portions of which have been included in Berriquin District) 4,505 acres, Barramein Provisional District (domestic and stock supply only—works not yet commenced) 88,651 acres ; *Murrumbidgee River* (completed)—Benerembah District 112,818 acres, Tabbita District 10,745 acres, Wah Wah Provisional District 571,358 acres, Gumly Provisional District 353 acres ; *Lachlan River* (completed)—Jemalong and Wylde's Plains District 224,556 acres.

Since the completion of the Hume reservoir, several such districts have been established along the Murray to utilize the New South Wales share of the storage. Water is not available for the whole of the 5,000,000 acres adjacent to the Murray in New South Wales, and therefore the schemes are based on "extensive" irrigation—that is, water rights are allotted to holdings on the basis that only a portion of each holding (one acre in three, five or ten, according to the district, etc.) will be irrigated, but additional water, when available, may be obtained by landholders. "Water right" means right to such a quantity annually of water, 12 inches deep, as will cover an area of one acre.

Water to serve Berriquin, Deniboota and Denimein Districts is diverted through a main canal which will be 100 miles long when completed. Water for the Wakool Irrigation District and the Tullakool Irrigation Area is diverted from the Edward River at Stevens Weir, and a supplementary supply is also obtainable from Mulwala canal. At 30th June, 1958, the total length of completed canals and channels in Berriquin District was 937 miles, including Mulwala canal 75 miles, Berrigan channel 22 miles, subsidiary channels 757 miles, escape channels 72 miles and cross drainage channels 11 miles. Off-take capacity of the Mulwala canal is 5,000 acre feet per day.

Wakool, with 384 miles of channel, contains 297 holdings and the area developed by irrigation comprises about one acre in 9 of the total area. The total area irrigated in 1957–58 was 63,064 acres and water supplied was 164,502 acre feet. Crops comprised fodders, pastures, rice, cereals and vegetables, but sheep raising is the main industry.

Considerable subdivision has occurred within the Berriquin District and the proportion of the total area developed for irrigation is higher than in the case of Wakool. Total irrigated acreage was 180,281 at 30th June, 1958. Sheep and wheat growing are the main industries. The fat lamb industry is well developed and expanding. Dairying is making headway, and a butter factory has been established at Finley.

In the Benerembah, Tabbita and Wah Wah Districts, supplied from the channels of the Murrumbidgee Irrigation Areas, the quantity of water supplied during the 1957–58 season for irrigation, etc. was 125,577 acre feet, and the area irrigated was 76,270 acres, including rice and other cereals, pastures, and fodder crops.

For the same season, 23,441 acre feet of water were supplied from the Lachlan River to irrigate a total area of 21,485 acres within the Jemalong and Wylde's Plains Districts.

**6. Water Trust Districts, Irrigation Trusts and Flood Control and Irrigation Districts.**—The Water Act provides for the constitution of Trust Districts for domestic and stock water and irrigation and empowers the Commission to construct, acquire or utilize necessary works. When the works are completed, they are handed over to trustees to administer. The trustees are elected by the occupiers of the land and act with a representative of the Commission. They are empowered to levy and collect rates covering the cost of the works repayable to the Crown by instalments and also the cost of operation and maintenance of the works. The rates are struck according to the area of land which benefits. The following water trusts—other than irrigation—have been constituted (the area in acres of each district is shown in parentheses)—*Murray River*—Tuppall Creek (78,080), Bullatole Creek (68,320),

Little Merran Creek (157,440), Poon Boon (32,980), Minnie Bend Flood Prevention (2,190); *Murrumbidgee River*—Yanco, Colombo and Billabong Creeks (1,001,210); *Lachlan River*—Torrigan, Muggabah and Merrimajeel Creeks (170,240) Condobolin West Weir (4,480), Marrowie Creek (292,640), Ulonga (71,655), Micabil Weir (11,500); *Miscellaneous*—Aludgerie Creek (9,760), Nidgerly Weir (46,880), Great Ana Branch of Darling River (967,339), Collarenebri town water supply (117)—making in all a total area of 2,914,831 acres. Thirteen of these trusts have been formed for the provision of water for domestic and stock purposes, one for a town supply and one for flood prevention.

Irrigation Trusts are established under the same Act and are administered by trustees in a similar way. The following are the Trust Districts (area in acres is shown in parentheses):—*Murray River*—Bama (3,446), Goodnight (1,167), Bungunyak—Koralceigh (1,810), Glenview (661), Bringan (4,933); *Darling River*—Pomona (1,580)—making in all a total area of 13,597 acres.

The Lowbidgee Provisional Flood Control and Irrigation District (375,000 acres), the first of its kind, was constituted in 1945. Its purpose is to provide flood irrigation for pasture lands on the lower Murrumbidgee by water diverted from the Maude and Redbank Weirs. There are 50 holdings. Another district, Medgun (272,800 acres) near Moree in the North-West is also in operation. There are 20 holdings in the district and the area benefited by controlled floodings is 61,760 acres.

**7. River and Lake, and Farm Water Supplies.**—During recent years, the numbers of licences and permits issued to individuals to draw water from rivers and lakes for irrigation have increased substantially, especially along the coastal streams in sub-humid districts where the value of supplementary irrigation is becoming more recognized as a means of stabilizing production in lean months. There has also been a considerable increase along the Murrumbidgee and Lachlan.

The Farm Water Supplies Act was passed in 1946. Technical advice and assistance, and also financial assistance, are made available to help individual farmers and groups of farmers to provide and improve water supplies for domestic, stock and irrigation purposes by means of wells, bores, excavated tanks, weirs or dams.

**8. Underground Water.**—Extensive use is made of artesian, sub-artesian, and shallow underground water. Eighty thousand square miles in the northern and western portions are covered by the Great Artesian Basin. Eighty-one Bore Water Trusts and 12 Artesian Wells Districts have been constituted. The Bore Trusts are administered in the same way as Water Trusts, but in Artesian Wells Districts settlers maintain the drains. Bore Trusts and Artesian Districts cover about 5 million acres and water is distributed through approximately 7,400 miles of open earth drains. The number of artesian bores giving a flowing or pumping supply at 30th June, 1958, was 1,045 and the estimated total daily flow from 587 flowing bores was 57 million gallons. The estimated flow in 1914–15 was 99 million gallons a day for 372 bores. The deepest bore is Boronga No. 2 (4,570 feet), which also has the greatest flow, namely, 1,115,000 gallons a day. Of the total number of bores sunk, 246 have been installed by the Government in connexion with public watering places, Bore Water Trusts or Artesian Wells Districts.

Good supplies of stock water are obtained in the Murray Basin in the south western corner of the State. The Oxley and Clarence Basins are of only minor importance. Coastal sands of the drowned and re-elevated coast provide excellent supplies but have only been extensively exploited at Sydney and Newcastle. The Botany sands were formerly the chief water supply for Sydney while the Tomago sands still contribute a considerable proportion of the Newcastle supply. Excellent supplies of water are also available in tertiary deep leads in many parts of the State, e.g. at Emmaville, Forbes and Kiandra. Large supplies are also available in buried channels in the widespread alluvium along practically all the major rivers and their tributaries in the State.

Fractured older rocks, particularly the Palaeozoic of the south-east corner of the State provide useful supplies of ground water usually at depths of 50–250 feet.

Since 1912, the Government has assisted settlers in shallow boring operations for which repayments are required over a period. To 30th June, 1958, the number sunk by the Commission's plants was 4,849 and their average depth was 305 feet.

**9. Future Programme.**—The programme of post-war development already in hand includes the provision of additional dams and storages, diversion weirs, and flood mitigation and river protection works in various parts of the State. Construction of Burrendong Dam on the Macquarie River is in progress and Keepit Dam on the Namoi River is nearing completion. Legislation has been passed authorizing the construction of a flood control dam at Warkworth in the Hunter Valley and a storage dam at Blowering on the Tumut River.

The Menindee Lakes storage project—part of the scheme for conserving the waters of the Darling River—has been recommenced. The Hunter River development, of which Glenbawn Dam is an integral part, concerns an exceptionally fertile coastal valley, forming the hinterland to Newcastle, where the annual rainfall is not heavy and variations from month to month are considerable. This is the first coastal scheme initiated in New South Wales. At 30th June, 1958, work was well advanced on construction of a diversion weir at Gogeldrie on the Murrumbidgee River from which water will be supplied to a new irrigation area (Coleambally) on the south side of the river comprising not less than 1,000 new irrigation farms. Later, development will extend to a new area on the north side of the river.

10. **Hydro-electricity.**—A survey of the use of water for power generation in New South Wales may be found in the previous chapter (*see p. 219*).

### § 3. Victoria.

1. **General.**—(i) *Rainfall.* Particulars of the rainfall pattern of Victoria were given on page 1117 of Official Year Book No. 37. (*See also Chapter II.—Physiography, p. 45, of this Year Book.*)

(ii) *Administration.* The passing of the Irrigation Act of 1886 put the control of surface waters under the Crown, provided for the establishment of Irrigation Trusts and marked the beginning of irrigation development. In 1905, the Water Act established the State Rivers and Water Supply Commission and gave it control of all irrigation, rural domestic and stock supplies, town water supplies, and flood protection and drainage undertakings outside the Metropolitan area, with the exception of the irrigation area operated by the First Mildura Irrigation Trust and the town water supplies operated by locally constituted waterworks trusts or local governing bodies.

The operations of the First Mildura Irrigation Trust, the waterworks trusts and local governing bodies administering town water supplies, the river improvement and drainage trusts and the various sewerage authorities which control sewerage undertakings in country towns, are also subject to general supervision by the Commission.

2. **Works Summarized.**—Since 1902, when a great drought emphasized the need for a concerted attack on water problems, the total capacity of water storages including Victoria's half share of River Murray storages has increased from 172,000 to 5,012,350 acre feet. Most of the water from these storages is used for irrigation. The area actually irrigated has risen from 105,000 acres in 1906 to 1,001,800 acres in 1957–58 to which 1,603,790 acre feet of water were delivered. The Commission estimated the value of irrigated production in 1956–57 at £47,000,000 representing about one-seventh of the value of Victoria's total rural production.

Town water supply and sewerage works have expanded to the stage where two-thirds of the population outside the metropolitan area is served by a reticulated water supply and one-third is served by a sewerage system. Land drainage, flood protection and river improvement have also been advanced.

A domestic and stock water supply is given to various rural areas throughout the State but principally to the Wimmera and Mallee about which detailed descriptions are provided later in the chapter.

Besides supplying water to its own irrigation districts, the Commission also supervises the diversion of water by private persons by means of licences and permits. In the last ten years the area so licensed has increased by 50 per cent and private diverters now provide a tenth of the irrigation production.

Another notable development in the post-war years has been Soldiers' Settlement Schemes based on irrigation. Altogether, nearly one thousand holdings have been prepared for settlers, including more than 500 in the Murray Valley District, 250 at Robinvale and 125 in Gippsland.

3. **Storages.**—The capacities of the main storages in the various systems (in acre feet) at 30th June, 1958, were as follows:—

*Goulburn System:*—Eildon Reservoir, 2,750,000; Waranga Reservoir, 333,400; Total, 3,104,100; *Murray-Loddon System:*—Half share of River Murray storages, 835,420; Cairn Curran, 120,600; Total, 1,105,730; *Wimmera-Mallee:*—Rocklands, 272,000; Total, 538,900; *Gippsland:*—Glenmaggie, 154,300; Total, 154,340; *Coliban:*—62,730; *Werribee-Bacchus Marsh:*—34,900; *Mornington Peninsula:*—5,800; *Otway:*—1,080; *Miscellaneous:*—4,770; *Grand Total:*—5,012,350.

4. **Extent of Systems and Nature of Irrigated Culture.** The following table shows the areas of the various irrigation systems and the areas under irrigated culture during 1957-58. The total area irrigated during the year 1957-58 was 15 per cent. greater than the previous record.

**AREAS OF SYSTEMS AND OF LAND UNDER IRRIGATED CULTURE : VICTORIA, 1957-58.**  
(Acres.)

System.	Total Area.	Area under Irrigated Culture.									Total.
		Cereals.	Lucerne. (a)	Other Fodder Crops.	Pastures.		Vineyards.	Orchards.	Market Gardens.	Fallow and Miscellaneous.	
					Sown.	Natural.					
<i>Goulburn</i> .. ..	1,256,896	16,769	13,629	8,587	334,256	27,245	202	16,338	3,872	3,917	424,815
<i>Murray—</i>											
<i>Torrumbarry Weir</i> ..	377,658	6,128	2,910	2,819	137,014	34,329	4,887	1,109	1,490	1,870	192,556
<i>Yarrowonga Weir</i> ..	267,774	982	12,290	780	76,777	6,756	22	3,783	624	298	102,312
<i>By Pumping</i> .. ..	35,718	55	277	15	572	522	23,933	1,860	412	..	27,646
<i>Total</i> .. ..	681,150	7,165	15,477	3,614	214,363	41,607	28,842	6,752	2,526	2,168	322,514
<i>Loddon and other Northern Systems</i> ..	(b)19,735	3,671	2,089	1,248	21,018	3,973	2	3,598	722	1,613	37,934
<i>Southern Systems</i> ..	147,668	111	1,976	409	51,186	2,265	..	615	5,844	1,069	63,475
<i>Mildura and Private Diversions</i> .. ..	(c)45,000	2,632	9,440	5,630	100,468	5,555	15,237	5,499	6,852	1,749	153,062
<b>Grand Total</b> ..	<b>2,150,449</b>	<b>30,348</b>	<b>42,611</b>	<b>19,488</b>	<b>721,291</b>	<b>80,645</b>	<b>44,283</b>	<b>32,802</b>	<b>19,816</b>	<b>10,516</b>	<b>1001800</b>

(a) Includes lucerne for both hay and pasture. (b) Area of Campaspe District only. (c) Area of First Mildura Irrigation Trust only.

5. **Irrigation Systems.**—(i) *Goulburn.* The storage capacity for this system is provided principally by Eildon reservoir. The enlargement of the storage capacity of this reservoir was completed in 1956, and will enable 600,000 acres to be irrigated when the necessary distributary works are completed. This is practically double what was previously possible with the original storage. Water from Eildon reservoir flows down the Goulburn River to the Goulburn Weir, located near Nagambie, which raises the summer level of the river about 45 feet for the purpose of diversion. From this weir, water is diverted via the East Goulburn Main Channel direct to the irrigation areas around Shepparton. The two western main channels from the weir (one of which was recently duplicated) convey water to the Waranga Reservoir near Murchison in addition to supplying part of the large Rodney District directly.

Two main outlet channels issue from Waranga reservoir. One serves the western section of Rodney District while the other serves irrigation districts as far west as Boort, and continues into the Wimmera-Mallee Domestic and Stock System to provide a supplementary supply as far as Beulah East.

Water is also supplied to part of the Goulburn System from Cairn Curran reservoir on the Loddon River, and Eildon itself may be used to supplement supply to the districts along the Murray River.

The main products of the Goulburn districts are dairy produce, fruit, wool and fat lambs. Annual production of canning fruits in the area is about two-thirds of Australia's total.

(ii) *Murray River System.* The waters of the River Murray are used to supply an area of more than 700,000 acres between Yarrowonga and Merbein. The districts between Yarrowonga and Swan Hill, except Tresco near Swan Hill, are supplied by gravitation and those west of Swan Hill are supplied by pumping.

The Murray Valley Irrigation District, which is served from Yarrowonga Weir, comprises 268,000 acres west of Yarrowonga between the River Murray and Broken Creek. Dairy products, fat lambs and canning fruit are the main items produced.

The gravitation system based on Torrumbarry Weir (52 miles downstream from Echuca) serves an area of about 378,000 acres around Cohuna, Kerang, Koondrook and Swan Hill. Also included in the Torrumbarry system is the Tresco district supplied by pumping from Lake Boga. Dairying and fat lamb raising are again the major industries. Vine fruits and vegetables are grown around Swan Hill and tobacco growing is increasing in importance.

West of Swan Hill lie four Commission districts with a pumped supply—Nyah, Robinvale, Red Cliffs and Merbein. These contain a total of 1,500 holdings devoted largely to dried vine fruit although citrus fruit and table and wine grapes are of some importance. The area around Mildura is controlled by the First Mildura Irrigation Trust, the only irrigation trust operating in Victoria. It serves an irrigated area about half the combined size of the four Commission districts.

(iii) *Southern Systems.* The most important southern system is an area of 130,000 acres around Maffra and Sale, mainly devoted to dairying. This is supplied from Glenmaggie Reservoir on the Macalister River and from the natural flow of the Thomson River when the flow is adequate. Other important irrigation districts are located quite close to Melbourne around Werribee and Bacchus Marsh. These districts are intensively developed for dairying and vegetable growing.

(iv) *Wimmera-Mallee Domestic and Stock Supply System.* This system serves an area of 11,000 square miles or nearly one-eighth of the State. Without the artificial supply of water, development in this area would be meagre and hazardous owing to the constant threat of drought. The main supply is drawn from the Grampians storages and is supplemented by water drawn from the Goulburn and Loddon Rivers, via the Waranga Western Channel referred to previously. In addition, certain areas in the north of the system are supplied direct from pumps on or near the River Murray.

As far as possible water is distributed in the winter and spring to reduce evaporation losses in 6,500 miles of Commission channels and 3,000 miles of farm channels. It is the responsibility of the 10,000 farmers served to provide sufficient storage capacity on their farms to meet their domestic and stock needs for the year. In addition to meeting this demand, the Grampians storages provide a water supply for 40,000 people in 47 towns and are used to irrigate a small area near Horsham.

**6. Town Water Supplies and Sewerage.**—The Commission supplies water to 130 towns throughout the State with a total population of more than 200,000 persons and 160 local authorities supervised by the Commission supply another 500,000 persons. Many of these local authorities are given a bulk supply of water by the Commission.

The areas controlled directly by the Commission comprise most of the Mornington Peninsula, Bendigo and nearby towns, nearly 50 towns in the Wimmera and Mallee, the Bellarine Peninsula, and five towns in the Otway district. The local authorities are scattered throughout the State and very few towns of any consequence are now without a reticulated water supply.

Sewerage systems are confined to the larger cities and towns in the State.

**7. Drainage, Flood Protection and River Improvement.**—The largest work in this category undertaken by the State Rivers and Water Supply Commission is the Kooweerup-Cardinia Flood Protection District embracing 80,000 acres of a continuous depression along the seaboard of Westernport. Once useless, indeed a hindrance to communication, this area now yields primary products worth £3 million a year.

Another large-scale work under construction is the drainage of 12,500 acres of privately owned land flooded by a recent rise in the level of Lake Corangamite in the Western District. This will free a large area of the lake for grazing and it may also make the production of salt a commercial proposition.

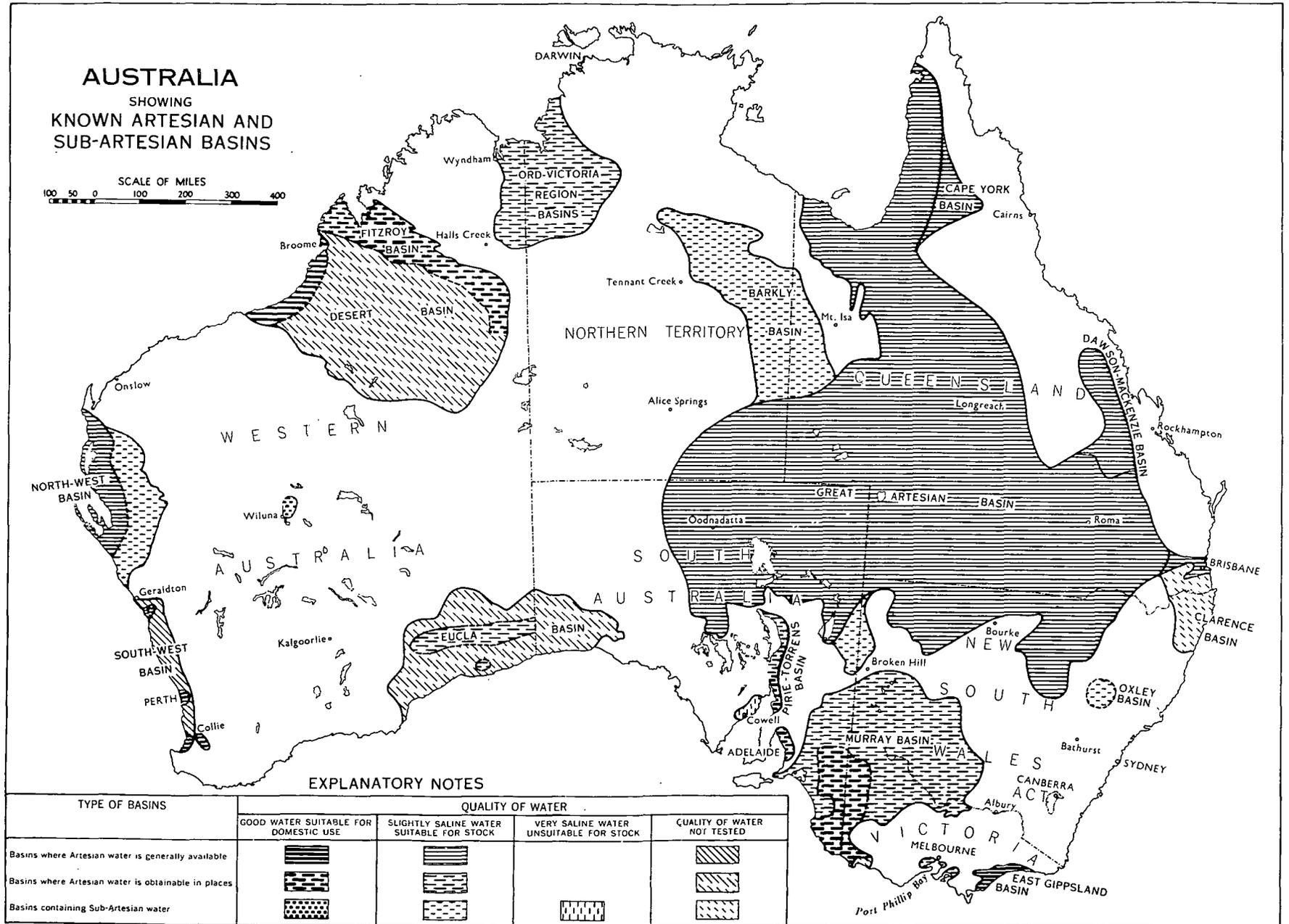
By the River Improvement Act of 1948, the formation of local river improvement and drainage trusts under the supervision of the Commission has been greatly facilitated and since 1950, 16 such trusts have been formed. The importance of river improvement work is expected to continue to grow.

**8. Finance.**—The capital liability of the Commission at 30th June, 1958, was £88,000,000. Of this amount, £60,000,000 was expended on irrigation and £7,000,000 on domestic and stock supply systems. Both these amounts were financed entirely by the State. The total liability for urban supply was £11,000,000 of which 60 per cent. was borne by the State and the remainder by the districts concerned.

# AUSTRALIA

SHOWING  
KNOWN ARTESIAN AND  
SUB-ARTESIAN BASINS

SCALE OF MILES  
100 50 0 100 200 300 400

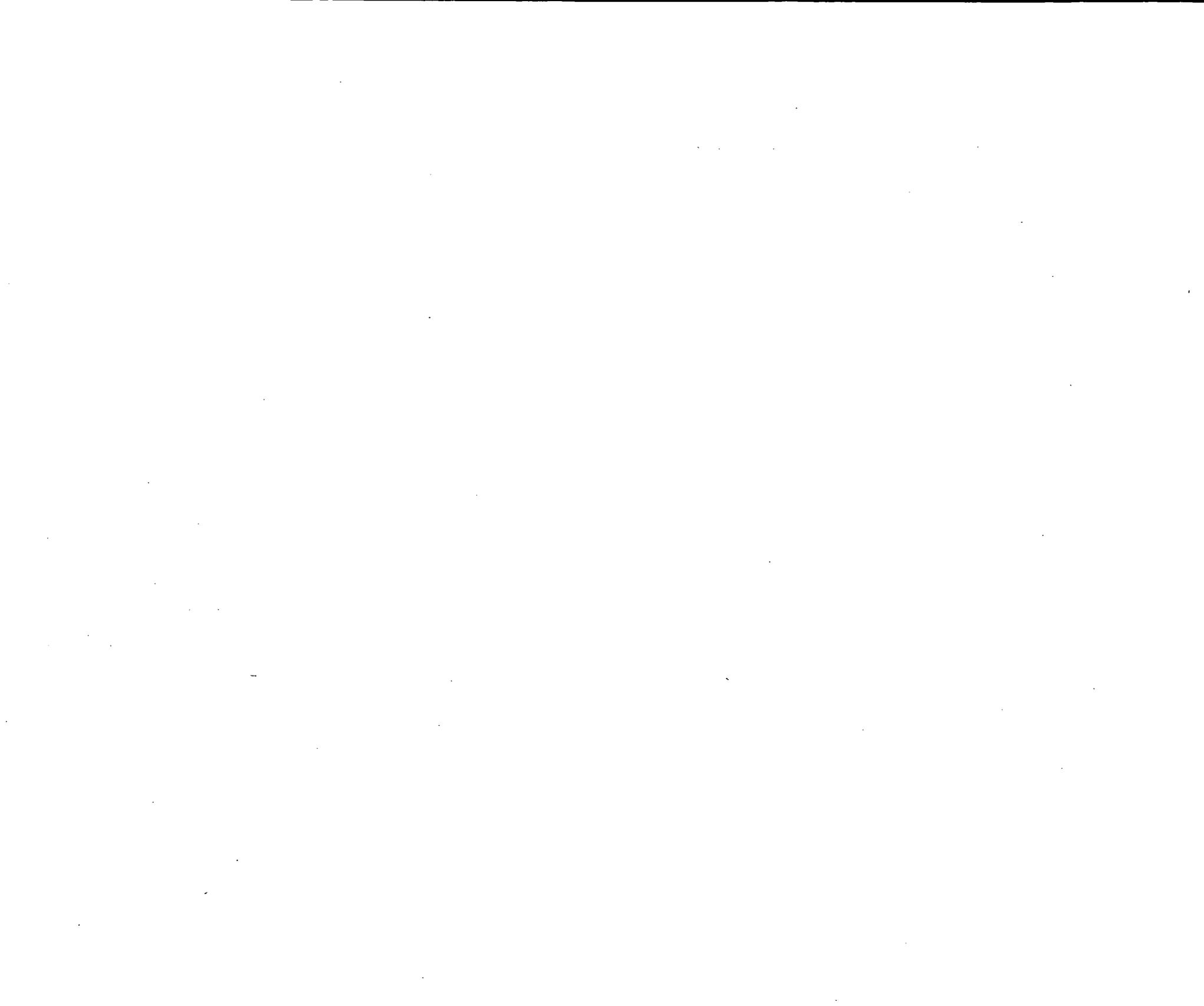


## EXPLANATORY NOTES

TYPE OF BASINS	QUALITY OF WATER			
	GOOD WATER SUITABLE FOR DOMESTIC USE	SLIGHTLY SALINE WATER SUITABLE FOR STOCK	VERY SALINE WATER UNSUITABLE FOR STOCK	QUALITY OF WATER NOT TESTED
Basins where Artesian water is generally available				
Basins where Artesian water is obtainable in places				
Basins containing Sub-Artesian water				

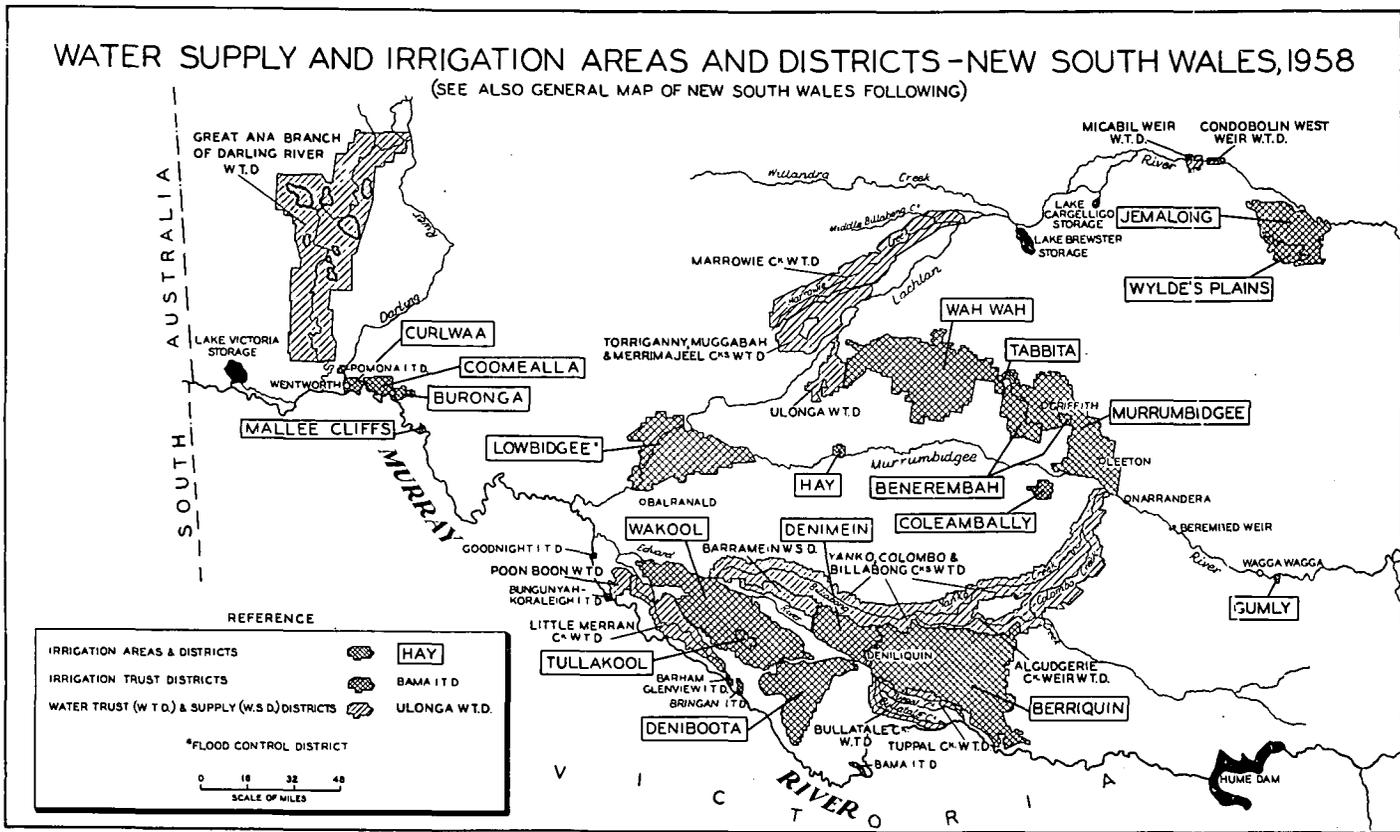
NMP/59/023

Adapted from the map "Underground Water" : Atlas of Australian Resources : Published by the Department of National Development 1953



# WATER SUPPLY AND IRRIGATION AREAS AND DISTRICTS - NEW SOUTH WALES, 1958

(SEE ALSO GENERAL MAP OF NEW SOUTH WALES FOLLOWING)



**REFERENCE**

IRRIGATION AREAS & DISTRICTS		HAY
IRRIGATION TRUST DISTRICTS		BAMA I T D
WATER TRUST (W T D) & SUPPLY (W.S.D) DISTRICTS		ULONGA W.T.D.

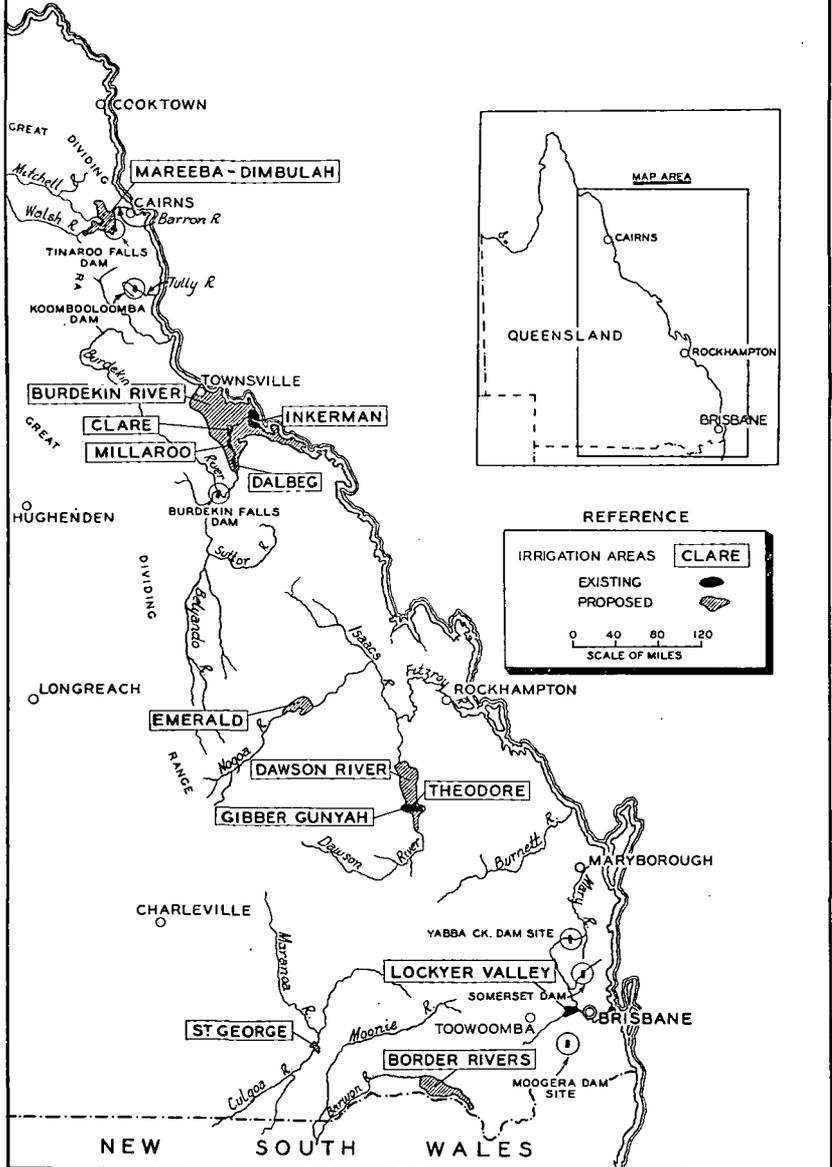
\*FLOOD CONTROL DISTRICT

0 16 32 48  
SCALE OF MILES

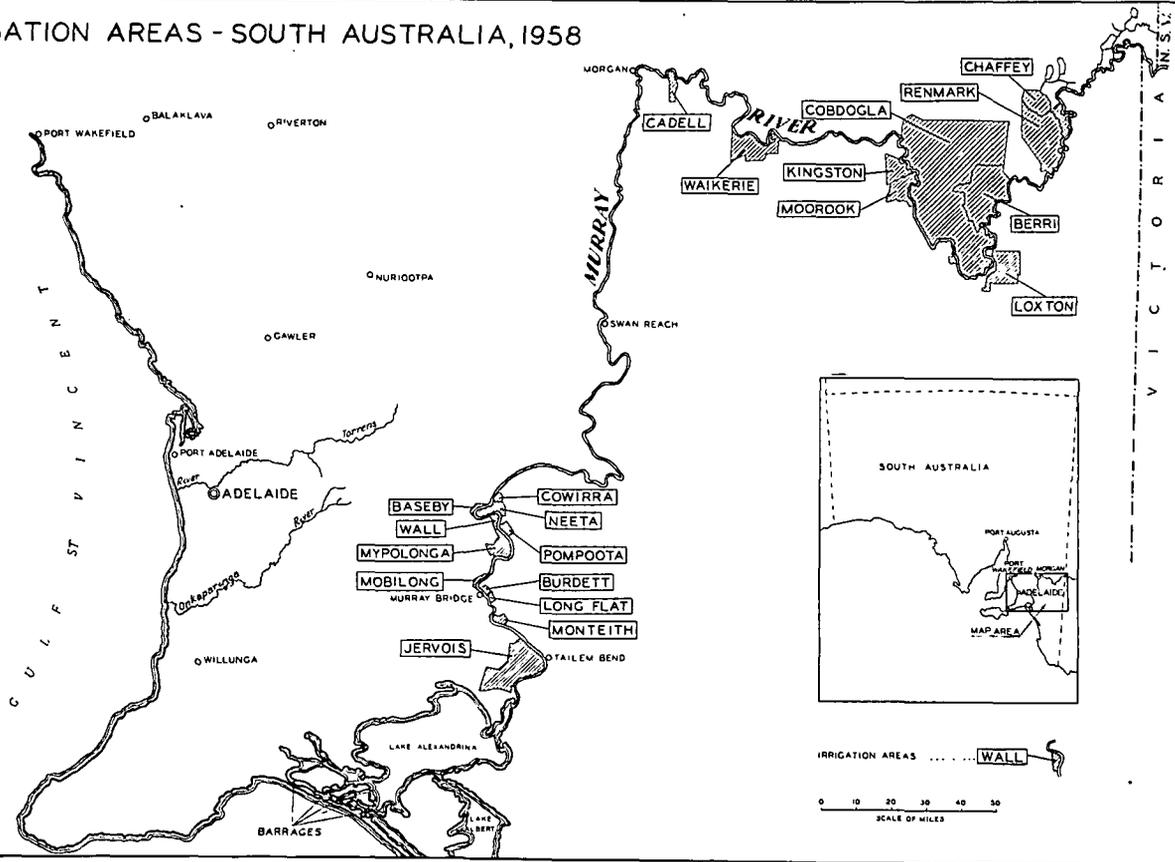




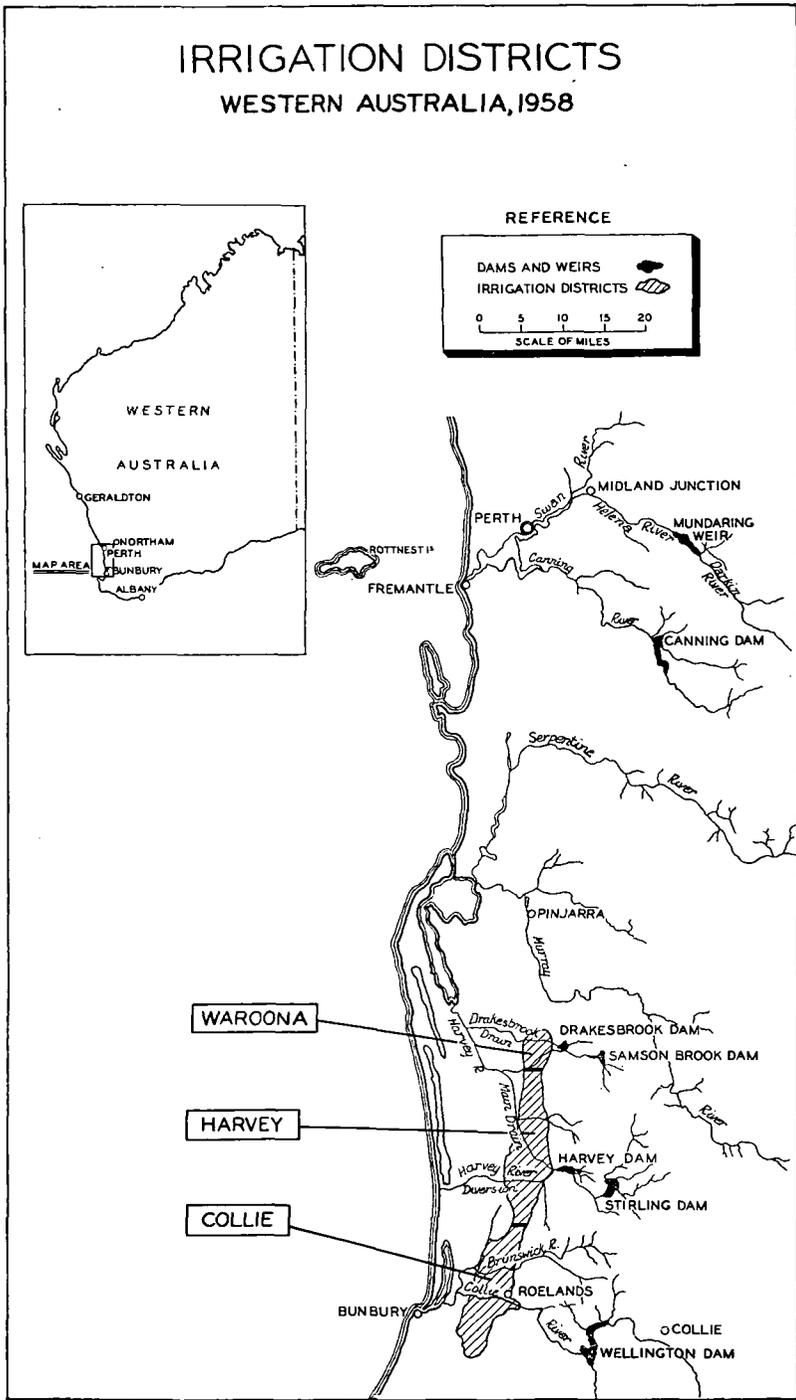
# IRRIGATION AREAS-QUEENSLAND 1958



# IRRIGATION AREAS - SOUTH AUSTRALIA, 1958



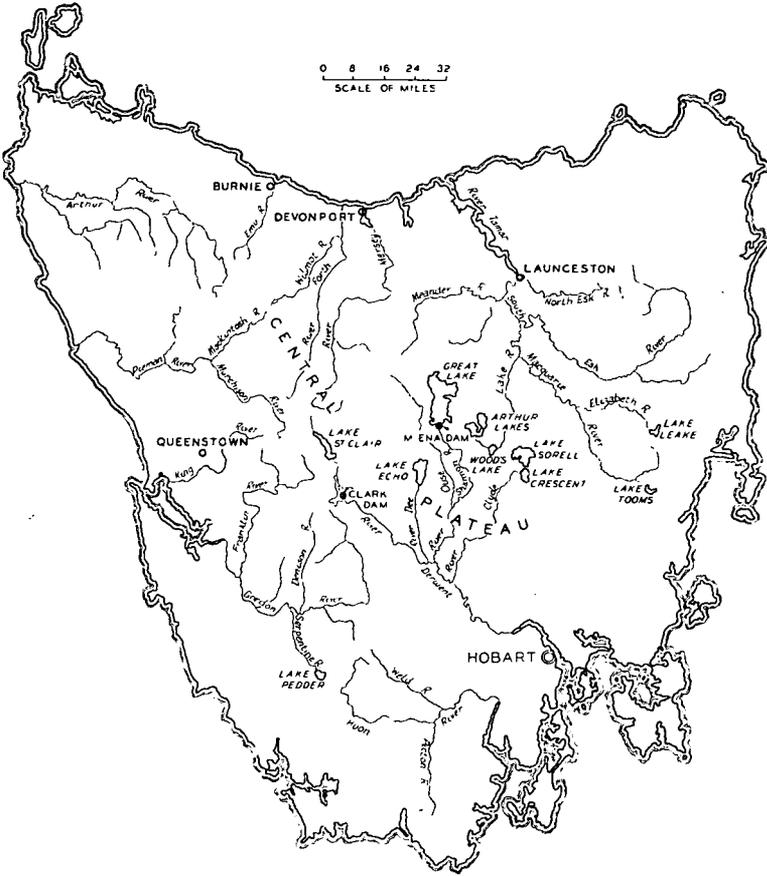
# IRRIGATION DISTRICTS WESTERN AUSTRALIA, 1958



# WATER RESOURCES OF TASMANIA

1958

0 8 16 24 32  
SCALE OF MILES





9. **Underground Resources.**—Due to inadequate information as to their extent, the underground waters of Victoria have not as yet been greatly utilized. The first stage of a comprehensive survey of these resources by the Victorian State Rivers and Water Supply Commission, which is partly responsible for the location, investigation and development of subterranean waters, has been completed. It provides records of bores in the Mallee, Wimmera and Glenelg regions, and a description of the Murray Artesian Basin. Investigations have also been made into the underground water resources of local areas such as Orbost Flats, Llowalong Estate on the Avon River and elsewhere.

The Murray Artesian Basin underlies an area of 107,250 square miles, of which 26,808 square miles are in Victoria, 28,269 square miles in South Australia and 52,173 square miles in New South Wales. The quality of the water varies from suitable for domestic purposes in much of the South-western part of the basin to saline and suitable for stock in the rest of the basin. Over 300 bores exist in Victoria, ranging in depth from 50 to 3,000 feet and with an average daily flow of 3,000,000 gallons. In the last few years, the Victorian Department of Mines has expanded considerably the work of exploration for underground water.

10. **Future Programme.**—The main irrigation work under construction is the enlargement of the channels of the Goulburn System to distribute the extra water now available from the Eildon Reservoir and the Cairn Curran Reservoir. A considerable amount of this work has already been carried out. Other work on hand includes construction of the Tullaroop Reservoir near Carisbrook to provide additional water for the town of Maryborough and for irrigation, and the extension of irrigation in the Maffra-Sale district in Gippsland.

11. **Hydro-electricity.**—Details of hydro-electricity potential and utilization in Victoria may be found in the previous chapter (*see* page 225).

#### § 4. Queensland.

1. **General.**—(i) *Rainfall.* Particulars of the rainfall pattern of Queensland are given in Official Year Book No. 37, page 1122. (*See also* Chapter II.—Physiography, page 45 of this Year Book).

(ii) *Administration.* The administration of irrigation and water supply in Queensland is under the control of a Commissioner of Irrigation and Water Supply. For a description of the development of the present administration *see* Official Year Book No. 42 and earlier issues.

(iii) *Water Utilization in Queensland.* Queensland's predominant interest in the field of water conservation is the provision of stock and domestic water supplies in its great pastoral areas which contain nearly half of the Commonwealth's cattle and a seventh of the sheep. In addition to the stabilization of water supplies in the pastoral areas and the provision of water along stock routes for travelling stock, the development of irrigated pastures on the eastern seaboard for fattening stock adjacent to meat works and markets has received much attention in later years. The development of projects of water conservation and irrigation on individual farms for irrigation of pastures and fodder crops for dairy herds and for growing small crops and orchard fruits has also received attention.

The State's crops differ from those of other States in that a large proportion is tropical. Sugar-cane is the greatest individual crop, representing in value approximately 50 per cent. of total agricultural production. Approximately 14 per cent. of the sugar-cane acreage was irrigated in 1957–58 and this represented some 44 per cent. of the total irrigated area in Queensland. Queensland is Australia's major tobacco-producing State, and plans are in hand to increase annual production of this crop greatly by means of development under irrigation. The area of tobacco irrigated during 1957–58 represented 92 per cent. of the total plantings of this crop in the State.

2. **Great Artesian Basin.**—(i) *General.* Western Queensland beyond the 20 inch rainfall belt is predominantly pastoral and is mainly dependent for water supplies on artesian and sub-artesian bores and, where surface storage is not readily available, on excavated tanks. The Great Artesian Basin in Queensland corresponds approximately with the area lying west and south of the Great Dividing Range, excluding the Cloncurry Mineral Field and the Barkly Tableland. It comprises 430,000 square miles or about two-thirds of the total State area of 670,500 square miles. Statistics of bores and flow as at 30th June, 1958, are :—Artesian bores drilled, 2,565 ; artesian bores still flowing, 1,682 ; total depth drilled, 3,644,785 feet ; deepest bore, 7,009 feet ; total estimated flow, 203 million gallons a day. Certain bores previously classified as "ceased" have been inspected and found to be still flowing. Some ceased bores, after deepening, are again flowing. The average depth of artesian bores is 1,421 feet. Some 9,200 sub-artesian bores, within the Great Artesian Basin, have been registered in Queensland. Artesian pressure and flow are both steadily diminishing, despite new bores drilled. The rate of diminution varies widely throughout the basin. Present general average rates of diminution are:—pressure, 1–2 feet/head, total flow, 2–3 per cent. per annum.

The greater part of the artesian discharge is distributed by open earth channels totalling some 15,500 miles in length. Most of the water flowing along these channels is lost by soakage and evaporation and less than 10 per cent. is actually used by stock. The amount of soakage depends largely on the permeability of the earth and the rate of evaporation varies from season to season, but the shape and maintenance of the drains constitute further factors. The effective utilization of this water could be increased by the use of piping to overcome the loss by soakage and evaporation occurring in open earth channels.

Although artesian beds underlie such a large area of the State, only 79,000 square miles are primarily watered by bore drains. The remaining area is watered by artesian bores (with small or no flow and limited drains), sub-artesian bores, excavated tanks, dams and natural waterholes. In many districts, artesian bores are not economical watering facilities, because of depth, limited area to be watered, and difficult terrain for distribution of water by drains. High costs have restricted deep drilling. Very few new bores exceed 2,000 feet in depth, and a new bore greater than 3,000 feet in depth is exceptional.

Shallow sub-artesian supplies, of variable quality and volume, are available at depths of less than 1,000 feet over a large area of the basin. These beds are not connected with the artesian beds. An essential practical consideration is that the main artesian beds are continuous and the sub-artesian beds are not continuous.

Though the number of bores has gradually increased over the years, the total flow of all bores has declined since the peak flow of 351 million gallons a day was recorded in 1914. By 1938, the flow was only 230 million gallons a day. The decline gave rise to the fear that supplies were giving out and that the basin was seriously threatened. In 1939, the Queensland Government appointed a committee to ascertain the nature and structure of the Great Artesian Basin with particular reference to the problem of diminishing supply. In its final report, presented in 1954, the majority of the Committee found that the output will continue to decline during the next sixty years when the flow from the remaining flowing bores will be of the order of 110 million gallons per day. At this stage, the discharge from windmills, springs and other leakages and the underflow past the Queensland borders will be of the order of 20 million gallons a day. The total discharge of the order of 130 million gallons a day will be in equilibrium with the recharge of the basin. Numbers of bores on higher ground will cease to flow during the next sixty years and the area served by flowing bores will contract by perhaps 20 per cent.

A programme of strict conservation, involving the restriction of bore flows and improved bore drains, would result in smaller shrinkage of the area served by flowing bores and would actually cost less than the installation and maintenance of pumps or other watering facilities which would be required to provide alternative water supply as additional bores ceased to flow because of a policy of non-restriction. On the other hand, strict conservation would not increase the amount of water ultimately available as perennial flowing supply and would in fact decrease the amount of water passed from intake beds to aquifers within the basin by flattening the hydraulic gradient. The benefit from strict conservation was not considered sufficiently great, nor sufficiently concrete, to warrant implementation.

The quality of artesian water from the greater part of the basin is such that it is not suited for prolonged use for irrigation on most soils. Moreover, artesian supplies are not sufficient for both large scale irrigation and stock-watering. Practically the whole of the final steady-rate discharge from flowing bores will be needed for the watering of stock. Detailed surveys of numerous other sources of underground water in the State, such as the smaller sedimentary basins, the Cainozoic alluvial deposits, recent coastal sands and fractured older rocks, still largely remain to be carried out.

(ii) *Bore Water Areas.* The constitution of Bore Water Areas was inaugurated in 1913 to aid pastoral settlement in districts where large flows were available at a cost beyond individual capacity and to conserve artesian supplies by fully utilizing the flows from the existing bores on the land resumed for closer settlement. Bores and drains are constructed from loan funds repayable over a period of years. The areas are administered by Local Boards or by the Commissioner of Irrigation and Water Supply, acting as a Board. Rates are levied to meet interest, redemption, maintenance and administration costs. Statistics for the year 1957-58 are:—Areas constituted, 61; administered by Commissioner, 55 administered by local boards, 6; area benefited, 4,063,748 acres; average rate per acre, 0.99d.; number of flowing bores, 55; total flow, 24,404,000 gallons per day; drains served, 2,754 miles.

3. *Other Basins.*—Two major areas bordering the Great Artesian Basin in Queensland carry artesian water. One is located on the western slopes of Cape York Peninsula and the other in the Dawson-Mackenzie River Basin. A small area in which flowing wells occur (the Gatton Basin) extends from Gatton to the coast.

Sub-artesian water supply from the Barkly Basin which extends into western Queensland from the Northern Territory, is referred to in the section dealing with the Northern Territory.

4. *Stock Route Watering.*—During 1935, a scheme was inaugurated to water adequately stock routes in the western portion of the State including main trunk routes connecting Eromanga to Burketown, Charleville to Normanton, and Clermont to Einasleigh, with branches to railheads, a total distance of 3,117 miles. Watering facilities were also provided on subsidiary routes. Under the Stock Routes and Rural Lands Protection Act of 1944, a co-ordinating board was constituted, representative of Government departments and pastoral interests, under the direction of the Minister for Lands and with an officer of that Department as superintendent whose duty was, *inter alia*, to investigate and implement a long-range, co-ordinated plan for adequate watering of all stock routes throughout the State. Natural waters are being supplemented by artificial facilities at intervals of about 9 miles. Construction is supervised by the Irrigation and Water Supply Commission and by local authorities. Completed facilities are vested in local authorities for control and maintenance. From 1935 to 30th June, 1958, 438 facilities had been completed and at 30th June, 1958, 64 facilities were under construction or investigation.

5. *Irrigation.*—(i) *General.* Irrigation as a means of stabilizing and increasing agricultural production is continuing to receive attention in Queensland. In addition to the Theodore Irrigation Area on the Dawson River, orthodox projects served by a channel system have been developed at Clare, Millaroo and Dalbeg, all on the Burdekin River, and Gibber Gunyah on the Dawson River. St. George on the Balonne River is also being developed. Construction in the St. George Area has been advanced sufficiently to permit opening of 20 farms. Construction of the main channel system within the Mareeba-Dimbulah Irrigation Area has continued and 16 existing farms are being supplied with water by gravity. Because of the large variations in both monthly and annual river flows, major developments cannot be undertaken until large storage works are provided. Most irrigation in Queensland is undertaken by private farmers operating under licence, and obtaining water by pumping from streams or from natural underground storages. There has been considerable development during the last two years of individual water conservation projects (water harvesting) to provide storage for irrigation of pastures, fodder crops and small crops, and, more recently, of orchards. Where available, electricity is the most popular source of power for pumping and the principal areas supplied with electricity are the Burdekin Delta, the Lockyer Valley, and the Darling Downs.

It has been estimated that about two thirds of the total area irrigated in Queensland, is supplied from underground water. The main areas where these supplies have been extensively developed are the Burdekin Delta (Ayr-Home Hill Area), the Pioneer Valley, Callide Valley, Lower Burnett (Bundaberg Area), Lockyer Valley and Redland Bay. Similar development is taking place in other areas such as parts of the Darling Downs.

Furrow irrigation is used for cotton, sugar cane, most tobacco and some other crops. Spray irrigation is adopted to a considerable extent for fruit, vegetables, fodder crops and a small part of the tobacco. Spraying is well suited to the application of water on deep soils by small pumping plants, particularly when the quantity of water available is limited. Use of the border check method in the irrigation of pasture and fodder crops has proved successful and its use is increasing.

The following table shows for each division of the State the number of irrigators and the areas under irrigated culture for the year ended 31st March, 1958.

AREA OF LAND UNDER IRRIGATED CULTURE : QUEENSLAND, 1957-58.(a)

Division.	No. of Irrigators.	Area under Irrigated Culture (Acres).							
		Vegetables.	Fruit.	Sugar-cane.	To-bacco.	Cot-ton.	Other Crops.	Pas-tures.	Total.
Southern Queensland ..	5,169	22,658	3,803	17,788	2,082	39	33,686	7,044	87,100
Central Queensland ..	543	924	144	2	499	5,233	1,818	8,620	
Northern Queensland ..	1,584	4,605	638	52,190	4,799	102	1,204	1,087	64,625
<b>Total .. ..</b>	<b>7,296</b>	<b>28,187</b>	<b>4,585</b>	<b>69,980</b>	<b>6,881</b>	<b>640</b>	<b>40,123</b>	<b>9,949</b>	<b>160,345</b>

(a) Year ended 31st March, 1958.

The pattern of irrigation in Queensland is unlike that in southern States ; the more important developments in tropical and sub-tropical areas are therefore discussed briefly in the sub-sections following. It should be noted that the spring to autumn " irrigation season " of the temperate southern irrigated lands is not applicable, and that round-the-year irrigation is required throughout most of the State, the timing and duration of the summer " wet " season being too variable to enable a definite non-irrigation season to be fixed.

(ii) *Lockyer Valley.* West of Brisbane and within 30 miles of that metropolitan market is the Lockyer Valley, which is portion of the Brisbane River Basin. The valley comprises an extensive flood plain where heavy black alluvial soil thickly overlies gravels and sands carrying water suitable for irrigation. Despite a mean annual rainfall of 30 inches, the variation is great, and irrigation is necessary for continuous agricultural production. Surveys suggest that some 60,000 acres of land highly suitable for irrigation are available. Of this area, only about 30 per cent. is under irrigation, the number of pumps operating from wells and open water exceeding 550 and 600 respectively. Over 60 per cent. of the farmers operate electric pumps for irrigation purposes and a special policy designed to encourage such development is fostered by the Southern Electric Authority of Queensland. The Irrigation and Water Supply Commission has constructed a number of small weirs on Lockyer Creek with a total storage of 1,370 acre feet. These also tend to augment and conserve underground supplies. To study local problems, an Irrigation Research Station was established at Gatton in 1946 by the Bureau of Investigation.

The Lockyer Valley produces a substantial proportion of Queensland's onions, potatoes, pumpkins, lucerne, hay, green fodder, maize and dairy products.

(iii) *Burdekin River.* The Burdekin River, which enters the sea between Townsville and Bowen, is a major factor in the life of North Queensland. In most years, heavy floods from a catchment twice the size of Tasmania cause extensive damage and traffic disruptions. On the other hand, the fertile delta area, with its underground water supplies at shallow depth, has contributed greatly to the agricultural prosperity of North Queensland. Present development is confined to the delta area. The average annual rainfall of this area is some 41 inches, but the major part falls in the months December to March. Consequently sugar growers and other farmers have tapped the underground water resources of the delta to obtain supplies in the dry periods. Sugar is the main irrigated crop, though citrus fruits, pineapples, vegetables and tobacco are also irrigated. The irrigated area is in excess of 30,000 acres, up to 1,000 acre feet of water being drawn daily from underground sources.

In the Home Hill-Inkerman areas on the south side of the Burdekin, water is obtained from shallow wells by electric pumps supplied from a local power station controlled by the Townsville Regional Electricity Board. Around Ayr, on the north side of the river, electric power from the mains of the Townsville Regional Electricity Board is now being adopted in place of the individual internal combustion engines previously used. At both Home Hill and Ayr, water for domestic supply is raised by a windmill on each property.

In 1940, the Burdekin River Trust was formed to safeguard the sugar areas of the Delta from erosion and floods. An irrigation research station studies the development of pastures and irrigated crops under local conditions.

A major multi-purpose scheme, involving irrigation, flood control and hydro-electric power generation, is being investigated by the various interested government departments under the general supervision of the Burdekin River Authority. The development envisaged includes a dam storing 6,584,000 acre feet, which would make water available for the irrigation of at least 250,000 acres. The principal industries anticipated are tobacco-growing, dairying and cattle-fattening, with sorghum, sunflowers, peanuts, cotton and sugarcane as other possible forms of production. The projected scheme will change the Burdekin from a mixed blessing to one of the Commonwealth's greatest resources for agricultural and industrial production.

The Clare Irrigation Area, constituted in 1949, the Millaroo Irrigation Area, constituted in 1952, and the Dalbeg Irrigation Area, constituted in 1953, are at present predominantly used for tobacco production. Located from 25 to 65 miles upstream from the mouth of the Burdekin, these areas comprise 12,000 acres and obtain irrigation waters from central pumping stations drawing initially on the unregulated flow of the Burdekin. A temporary storage of 6,700 acre feet capacity has been constructed about 79 miles upstream from the mouth of the Burdekin. At 30th June, 1958, 155 farms were occupied and total production for 1957-58 was valued at £576,000.

(iv) *Dawson Valley.* The Dawson River, a 392-mile long tributary of the Fitzroy River, rises in the Carnarvon Range and joins the Mackenzie River to form the Fitzroy 50 miles west of Rockhampton. Lands bordering the river in its northerly course of about 170 miles before its confluence with the Mackenzie River are commonly termed the Dawson Valley. A scheme for the development of the Dawson Valley providing for the irrigation of 70,000 acres was inaugurated in 1923. Storage for the scheme was to be provided by a dam of 2,500,000 acre feet capacity at Nathan Gorge. Much investigational and survey work on the scheme was carried out, but the general financial depression and limited loan funds brought about the cessation of this work. However, the initial step in construction had been completed, comprising a weir on the river at Theodore and irrigation works to serve an area of 3,500 acres supplied from a central pumping station. Two additional weirs have since been built, giving a total storage of 10,280 acre feet. Pasture, vegetables, cotton, fruit and dairy products are the principal produce. Attention has recently been given to the former plans for the valley and earlier work is now under close scrutiny as a prelude to future development. Construction of works to serve some 2,400 acres at Gibber Gunyah, adjacent to the existing Theodore Area, has been completed and 19 farms have been occupied.

(v) *Mareeba-Dimbulah Area.* The existence of large areas of sandy soils suitable for tobacco production in the valleys of the Walsh and Barron Rivers in the neighbourhood of Mareeba and Dimbulah has led to large-scale investigations into possible irrigation development in the area. Surveys indicate that 40,000 acres of land suitable for irrigated culture, including 32,000 acres suitable for tobacco, are available. In 1955-56, some 3,026 acres of high-grade tobacco were grown. Seven weirs with a combined capacity of 2,650 acre feet have been completed on a number of streams to store water for irrigation.

During 1952, a report on the utilization of waters of the Barron and Walsh Rivers was prepared and the establishment of an irrigation undertaking approved by the Queensland Government. The projected undertaking provides for construction of a major storage at Tinaroo Falls on the Barron River to store 320,000 acre feet, and construction of irrigation works to serve 78,000 acres commanded by this storage. In each case, construction has commenced. Further development by construction of a second storage at Nullinga on the Walsh River has been deferred for the present. Tobacco will be the basic crop while peanuts, vegetables, maize, cotton and stock fattening also appear suitable.

(vi) *Border Rivers Project.* The development of the rivers constituting portion of the border between Queensland and New South Wales is under the authority of the Dumaresq-Barwon Border Rivers Commission on which each State is represented. For information on the project *see* page 244.

(vii) *Balonne River.* The St. George Irrigation Area has been constituted and construction of works to serve some 11,000 acres is in progress. Water supply for the area will be obtained by pumping from the combined weir and road bridge on the Balonne River at St. George.

6. **Bureau of Investigation.**—Under the Land and Water Resources Development Act of 1943, a Bureau of Investigation has been set up for the co-ordinated investigation of land and water resources development.

The Bureau consists of representatives from the authorities controlling water resources, lands and agriculture, under the chairmanship of the Co-ordinator-General of Public Works. Among notable works carried out by the Bureau of Investigation has been the trial planting of irrigated pastures with a view to developing mixtures suited to the special conditions of each part of the State. Other valuable work has included the mapping of the ultimate land uses of the State and the detailed investigation of the agricultural and pastoral potentialities of many regions.

7. **Channel Country.**—Extensive investigations of the Channel Country fed by inland rivers in the south-western corner of the State have been made by the Bureau of Investigation. This country is intersected by shallow and irregular flood channels through which huge volumes of flood waters pass in favourable seasons; consequent on the flooding, a heavy growth of natural pastures is produced on the flooded lands, providing feed in quantities far in excess of that required for the normal stock population of the area. If the occurrence of flooding could be made more reliable by means of storages to create artificial floods, the pastoral resources of the area would be enormous. However, inquiries directed on these lines have revealed that little can be done to increase or stabilize the turn-off of fat cattle by artificial storage.

At 30th June, 1952, 41 watering facilities, at an estimated cost of £277,000, had been proposed under a Commonwealth-State agreement for stock routes through and in the approaches to the Channel Country. By 30th June, 1958, 29 had been completed, while two sub-artesian bores and one excavated tank were under construction.

8. **Hydro-electricity.**—An outline of Hydro-electricity Schemes operating in Queensland is given in the previous chapter (*see* page 227).

## § 5. South Australia.

1. **General.**—(i) *Rainfall.* Brief particulars of the climatic conditions in South Australia are given on page 1129 of Official Year Book No. 37. (*See also* Chapter II.—Physiography, p. 45 of this Year Book.)

(ii) *Administration.* Water supplies, other than irrigation works, are under the control of the Engineering and Water Supply Department, which administers the Waterworks Act governing the supply of water through mains in water districts for townships and farm lands. The Water Conservation Act provides for the construction of storages in non-reticulated areas and authorizes the Minister to "divert and impound the water from any streams or springs or alter their courses, and take water therefrom, or any other waters as may be found in, under, or on, any land entered upon for the purpose of supplying water to the inhabitants of any water district".

(iii) *Methods of Catchment and Conservation.* Early in the history of the State the rights to all running streams, springs and "soaks" were vested in the Crown. The Water Conservation Act was passed in 1886 and, up to 30th June, 1958, more than 550 dams, tanks and "rainsheds" had been built or acquired by the State, in addition to 460 wells and 340 bores, at a total cost of £1,758,201. The "rainsheds" comprise timber frameworks roofed with galvanized iron to catch precipitation which is delivered to storage tanks and is available for surrounding settlers and travellers. Rainshed catchments vary from a few hundred square feet to four acres, discharging into tanks ranging from 2,000 to 500,000 gallons. Over most of the State, extraordinary precautions are taken to counteract evaporation. Pipelines in preference to open channels and covered storages are used to reduce evaporation. Meters are attached to practically all services to check usage by individual consumers.

2. *Irrigation.*—In South Australia, irrigation is almost exclusively confined to the Murray Valley. Except for that held in various lock pools, no water from the Murray is stored in South Australia. Water is either pumped on to the land or gravitated from the river. The upper Murray of South Australia and the Mildura area of Victoria formed the cradle of Australian irrigation. South Australian irrigation commenced with an agreement between the Government and the Chaffey brothers in 1887 whereby an area of land at Renmark was made available for the establishment of certain irrigation works. Including land allotted for War Service Land Settlement purposes, the Department of Lands administers in the Murray Valley an area of 32,736 acres of irrigable high land together with 9,439 acres of reclaimed swamp and 167,207 acres of non-irrigable land in the irrigation areas and 29,747 acres of land temporarily leased and reserved for commonage or other purposes, amounting in all to 239,129 acres. In addition, the Renmark Irrigation Trust controls 20,557 acres, of which more than 9,500 are irrigated. Water used for irrigation purposes in 1957–58 in the high land irrigation areas controlled by the Department of Lands, excluding War Service Land Settlement areas in course of development, was approximately 100,000 acre feet and, in addition, approximately 63,000 acre feet were applied to the reclaimed areas. In the Renmark area, approximately 28,000 acre feet of water were used for irrigation in 1957–58. The production of the upper Murray areas is almost exclusively fruit and vines. Principal crops are sultanas, currants, lexias, apricots, peaches, nectarines, pears and figs (mainly for dried fruit), wine grapes, and citrus fruits. Before irrigation, these semi-arid lands were of little productive value.

Renmark Irrigation Trust is administered by a local board of management consisting of seven members. This area differs from other South Australian irrigation areas in that the land is freehold instead of leasehold, self-contained and self-controlled. Every settler is entitled to vote for the election of Trust members. The Trust maintains 100 miles of channel for reticulation to 9,550 acres.

The following tables show the acreage devoted to various crops in the government-controlled and Renmark Irrigation Trust areas on the upper Murray, and in the government-controlled reclaimed swamp districts near the mouth of the Murray, which are devoted to dairying.

**AREA OF LAND UNDER IRRIGATED CULTURE, 1957-58.**  
**IRRIGATION AREAS ADMINISTERED BY THE DEPARTMENT OF LANDS AND**  
**THE RENMARK IRRIGATION TRUST.**

(Acres.)

Area.	Vine Fruits.	Tree Fruits.	Citrus Fruits.	Lucerne.	Sown Pastures.	Total.
<i>Areas Administered by the Department of Lands.</i>						
<i>Orchard Land—</i>						
Berri .. ..	5,207	1,036	1,296	..	..	7,539
Cadell .. ..	577	152	112	..	..	841
Waikerie .. ..	1,897	589	1,262	..	..	3,748
Cobdogla .. ..	3,810	155	195	..	..	4,160
Moorook .. ..	347	120	191	..	..	658
Kingston .. ..	222	83	230	..	..	535
Mypolonga .. ..	..	337	527	..	..	864
Chaffey—Ral Ral Division .. ..	794	79	11	..	..	884
<i>Total .. ..</i>	<i>12,854</i>	<i>2,551</i>	<i>3,824</i>	<i>..</i>	<i>..</i>	<i>19,229</i>
<i>War Service Land Settlement—</i>						
Cooltong Division .. ..	375	255	482	..	..	1,112
Loxton area .. ..	3,055	1,079	2,181	..	..	6,315
Loveday Division .. ..	235	47	22	..	..	304
<i>Total .. ..</i>	<i>3,665</i>	<i>1,381</i>	<i>2,685</i>	<i>..</i>	<i>..</i>	<i>7,731</i>
<i>Reclaimed Swamp Land—</i>						
Monteith .. ..	..	..	..	..	960	960
Mypolonga .. ..	..	..	..	..	1,314	1,314
Wall .. ..	..	..	..	..	490	490
Burdett .. ..	..	..	..	..	109	109
Mobilong .. ..	..	..	..	..	429	429
Long Flat .. ..	..	..	..	..	339	339
Neeta .. ..	..	..	..	..	561	561
Pompoota .. ..	..	..	..	..	422	422
Cowirra .. ..	..	..	..	..	567	567
Jervois .. ..	..	..	..	..	3,602	3,602
<i>Total .. ..</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>8,793</i>	<i>8,793</i>
<i>Renmark Irrigation Trust.</i>						
<i>Renmark Irrigation Trust</i>	<i>7,330</i>	<i>950</i>	<i>1,270</i>	<i>..</i>	<i>..</i>	<i>9,550</i>

3. **Water Supply Schemes.**—(i) *Adelaide Metropolitan Water Supply.* Adelaide derives its water from five reservoirs in the nearby Mount Lofty Ranges, and by means of pumping stations and a pipeline from the River Murray at Mannum. The reservoirs have a storage capacity of 51,497 acre feet and the pipeline a capacity of 53,627 acre feet per year. The consumption for the year 1957-58 was 75,045 acre feet, equivalent to a consumption of 104 imperial gallons per head per day. The capital cost to 30th June, 1958, was £26,904,680.

(ii) *Country Reticulated Supplies.* Areas extending to a distance of 90 miles north of Adelaide are supplied from the Warren, Barossa, and the recently completed South Para Reservoirs (36,290 acre feet) in the Barossa Ranges. To supplement these storages, a branch main from the Mannum-Adelaide Pipeline feeds into Warren Reservoir.

Agricultural towns and areas further north are supplied from Beetaloo, Bundaleer and Baroota Reservoirs, with connections to the Warren system and the Morgan-Whyalla Pipeline. The 223-mile pipeline from Morgan on the River Murray to Whyalla was designed to deliver annually 4,400 acre feet to Whyalla, and 3,300 acre feet to the northern districts. Branch pipelines have been constructed to Jamestown, Caltowie, Peterborough, Clare and Woomera. Yorke Peninsula is now being reticulated. A pipeline has been laid from the Bundaleer Reservoir, and the reticulation system will be extended south to Edithburgh. Work is in progress on the construction of the Myponga Reservoir. A concrete arch dam is being built on the Myponga River, impounding 22,000 acre feet of water. This storage will be used to supply towns and country lands south to Normanville, and as an additional source of supply for the Adelaide Metropolitan area.

Water conservation and distribution works in country districts have cost £28,588,594 (exclusive of river control and irrigation works on the River Murray) and contain 6,126 miles of water mains. The capacity of country storages is 71,486 acre feet serving a population of approximately 305,000.

4. *Underground Water.*—The occupied portion of South Australia is, on the whole, well endowed with underground water and the extent of the several artesian basins is reasonably well known. There are also considerable areas, notably in the south-east of the State, in which ground water occurs. Quality varies widely, but a great deal is at least useful for watering stock and this is the major use to which it is put.

The deepest portion of the Great Artesian Basin (in the north-east) is not extensively developed because development costs are high in proportion to the carrying capacity of the arid land. However, deep boreholes have been drilled by the government to provide watering places along stock routes, and pastoralists rely largely on supplies from non-pressure aquifers at shallower depths. Marree township is supplied from this source, its deepest bore being 575 feet.

The use of the waters of the Murray Basin is essential to settlement in the Murray Mallee country and in the south-east of the State, especially for farms and township supplies to Mount Gambier, Naracoorte, Bordertown, Pinnaroo, Penola, Lamerook, Coonalpyn, Nangwarry, Mount Burr, Kingston (S.E.), Parilla and Karoonda. The deepest bore in this Basin is 1805 feet. Towns elsewhere which are supplied from bores include Mount Barker, Port Lincoln, Peterborough, Warooka and Willunga.

Pastoralists, farmers, market gardeners and others have been assisted with expert advice on drilling, for which the Government maintains about 30 drills. The whole of the Murray River Basin has been examined critically to ascertain the extent of land which could be used for lucerne and considerable tracts of previously undeveloped country in the Upper South-east, Kangaroo Island and Yorke Peninsula have been found to have usable water and are now being opened up.

Ground water resources surveys are undertaken continually by departmental geologists, the results being published in various bulletins and reports issued from time to time.

5. *Farm Water Schemes.*—While the Department of Mines and the Engineering and Water Supply Department give assistance to individual farmers in the provision of supplies from underground sources, a great part of the farming areas obtains water supply under pressure from the extensive distribution systems connected to various reservoirs on the Murray River.

6. *South-Eastern Drainage.*—For some information on the drainage schemes necessary for the disposal of surplus water in areas in the south-east of South Australia see Official Year Book No. 37, page 1133.

## § 6. Western Australia.

1. *General.*—(i) *Rainfall.* Brief particulars of the climatic conditions in Western Australia are given on page 1133 of Official Year Book No. 37. (See also Chapter II.—Physiography, page 45 of this Year Book.)

(ii) *Administration.* Irrigation districts are administered by the Minister for Water Supply, Sewerage and Drainage under the Rights in Water and Irrigation Act 1914–1951, and he is advised by an Irrigation Commission representing the local irrigationists and governmental technical and financial branches. Water supplies in country areas in Western Australia coming under the provisions of the Water Boards Act 1904–1954 and the Country Areas Water Supply Act 1947–1957 are controlled either by the local authority or by the

Water Supply, Sewerage and Drainage Department. Those controlled by the Department (except for some water supplies to country towns still under the provisions of the Water Boards Act) form the Country Areas Water Supply, consisting of the Goldfields and Agricultural Water Supply, the Great Southern Towns Water Supply and water supplies to country towns. The Department also controls individual water supplies serving isolated mines, stock routes, and agricultural areas. Natural water rights in the State, with few exceptions, are vested in the Crown.

2. **Irrigation.**—(i) *South-West.* The main irrigation areas are situated along the South-Western Railway between the towns of Waroona (70 miles from Perth) and Dardanup (116 miles from Perth).

The Public Works Department controls three irrigation districts—Waroona, Harvey and Collie—the total area irrigated in these districts during 1957–58 being 25,419 acres and the total water used approximately 90,000 acre feet. The total of acre waterings (that is, the number of acres watered multiplied by the average number of waterings) was 146,236. Investigations are being carried out with a view to irrigating a further 30,000 acres south of the Collie Irrigation District.

The Waroona Irrigation District (10,397 acres) is supplied from Drakes Brook Dam (1,854 acre feet capacity) and Samson Brook Dam (6,624 acre feet), the Harvey Irrigation District (37,269 acres) from the Harvey Weir (8,370 acre feet) and Stirling Dam (44,160 acre feet), and the Collie Irrigation District (36,020 acres) from the Wellington Dam (29,440 acre feet).

The following table, which shows acre waterings supplied to crops in the irrigation districts of Harvey, Waroona and Collie during the seasons 1953–54 to 1957–58 illustrates the growth of these irrigation schemes.

IRRIGATION, WESTERN AUSTRALIA : ACRE WATERINGS(a).

Year.	Pasture.	Fodder.	Potatoes.	Vegetables.	Orchard.	Flax, Broom Millet, and Preparation of Ground.	All Crops.
1953–54 .. ..	98,645	3,435	4,405	3,003	1,072	115	110,675
1954–55 .. ..	112,659	3,268	2,363	3,294	845	121	122,550
1955–56 .. ..	108,468	3,599	1,834	3,452	946	127	118,426
1956–57 .. ..	129,502	3,757	3,995	3,317	1,024	119	141,714
1957–58 .. ..	133,634	5,384	3,299	2,947	972	—	146,236

(a) Number of acres watered multiplied by average number of waterings.

(ii) *General.* In 1957–58 the total area irrigated in Western Australia was 41,319 acres made up of vegetables (8,417 acres) fruit (5,794 acres) vineyards (575 acres) pastures (24,328 acres) and other crops (2,205 acres).

An area of approximately 500 acres of Gascoyne River flats adjacent to Carnarvon has been under irrigated cultivation for a considerable period. The principal crop has been bananas but others such as beans and tomatoes, are also grown. For this agriculture, a total of over 220 acre feet of water a week is drawn from river underflow.

On the Liveringa flood plain, 65 miles south east of Derby, commercial production of rice has been achieved following successful experimental work. Irrigation water from the Fitzroy River is diverted through Uralla Creek, an anabranch, for 25 miles to the rice growing area where a natural storage of 2,000 acre feet exists. During periods of low flow in the Fitzroy River, the supply of water is augmented by pumping.

The Ord River in the Kimberley Division of Western Australia traverses a tropical area served with monsoonal rains of irregular incidence and quantity, varying from 20 inches in the south to 30 inches in the north. The hottest months (December to March) are also the months of highest rainfall. Communications and population are sparse. The Western Australian Government is considering a proposal to build a dam to conserve 3,000,000 acre feet of water, equipped with a hydro-electric plant, which might supply irrigation water for an area of 100,000 acres, if investigations show that the climate and soil conditions are suitable for vegetables, tropical fruits and rice. The economic production of these and other crops, as well as the possible use of such irrigation areas for interim fattening of cattle, is being examined at the Kimberley Research Station on the Ord River.

3. *Water Supply Schemes.*—(i) *Goldfields and Agricultural Water Supply.* Western Australia has one of Australia's most spectacular water supply schemes, and a brief account of its development will be found on page 1134 of Official Year Book No. 37. Mundaring reservoir on the Helena River, 26 miles from Perth, is the source of water supplied to the Eastern Goldfields and has a capacity of 55,767 acre feet and a catchment of 569 square miles. The water passes through 346 miles of main, mostly steel and 30 inches in diameter, aided by seven pumping stations and one booster pumping station.

Maximum pumping capacity from No. 1 Pumping Station at Mundaring Weir is nominally 15.9 million gallons per day. The total capacity of all receiving, regulating, standby and service tanks along the main pipe line is 154 million gallons which includes three standby reservoirs at Kalgoorlie having a combined capacity of 60 million gallons.

Hundreds of miles of branch pipe lines have been laid to mining areas, agricultural areas and country towns, a notable one being the Norseman extension of 101 miles. The system serves some 72 towns and water is reticulated to about 2,070,000 acres of mixed farming lands. The total length of pipe lines is 2,656 miles and the number of services is 21,256. The total quantity of water pumped from Mundaring in 1957-58 was 3,243 million gallons. The total cost to the State Government of the scheme to the end of 1957-58 was £12,371,134. Under the terms of the Comprehensive Water Supply Scheme the Commonwealth Government has contributed a further £1,910,093 making a total cost of £14,281,227.

District water supply schemes established for the purpose of supplying certain country towns and mixed farming lands have been absorbed into the Goldfields and Agricultural Water Supply Scheme. For further particulars see Official Year Book No. 37, page 1135.

(ii) *Comprehensive Water Supply Scheme.* A comprehensive water supply scheme to supplement water supplies to the goldfields, agricultural areas, and country towns, authorized in 1947 as a joint work between the Commonwealth and State and estimated to cost £10,000,000 is at present (1958) under construction in two main parts. The northern section is an enlargement and extension of the Goldfields and Agricultural Water Supply Scheme. The southern section is the Great Southern Towns Water Supply Scheme. Linked with Wellington Dam (initially an irrigation work on the Collie River) by 80 miles of 30-inch diameter pipe through two pumping stations to Narrogin, it now supplements the existing water supplies to country towns along the Great Southern Railway, north to Pingelly and south to Katanning. The extension from Pingelly to Brookton (now in hand) will, when finished, complete the southern section. The raising of the impounding wall of Wellington Dam to increase its storage to about 150,000 acre feet is also in progress.

(iii) *Country Towns Water Supplies.* Country towns supplied by schemes otherwise than above comprise those in the remaining agricultural and mining areas, including the North-West and Kimberley Divisions. Sixty-one separate reticulated water supplies serve country towns. Of these, 54 are controlled by the Public Works Department and the remainder by the local authority.

(iv) *Catchments.* The water supplies to these country schemes come from stream flow, dams, tanks, wells and bores. Three types of catchment peculiar to this State deserve special mention, namely, rock catchments, which consist of mostly clear granite out-cropping rock, from which the overall run-off from rain amounts to approximately 40 per cent.; bituminous catchments, which are areas which have been sealed with emulsified bitumen—some hundreds of acres have been so treated and yield a run-off of approximately 80 per cent. of the rainfall; and roaded catchments, where selected areas of a catchment are cleared, graded and formed into roads to assist in obtaining additional rainfall run-off.

4. *Underground Water.*—Individual farmers, orchardists, market gardeners and others pump ground water from wells and bores, using windmills, engines or electric power. Water is also obtained from artesian and sub-artesian bores. The Public Works Department hires out to local authorities boring plants which are then hired out to farmers to assist their boring operations. In addition the department operates its own boring plants and contracts with private firms in connexion with water supply works.

Considerable advances in the knowledge of aquifers and quality of water in the main sedimentary basins have been made as a result of the extensive geological surveys in connexion with oil exploration during the past ten years and most of these results are now in the course of publication. In view of the importance of finding water for towns and farms in low rainfall areas outside the sedimentary basins the Geological Survey of Western Australia and the Commonwealth Bureau of Mineral Resources recently combined to apply geo-physical prospecting to the search for water in weathered granites in the south western part of the State. The results of this work so far have been promising.

## § 7. Tasmania.

1. General.—(i) *Rainfall.* Brief particulars of the rainfall pattern in Tasmania are given on page 1136 of Official Year Book No. 37. (See also Chapter II.—Physiography, page 45 of this Year Book.)

(ii) *Main Purposes of Conservation and Utilization.* Owing to Tasmania's fortunate rainfall position, scarcity of water is not a serious problem in normal seasons. Conservation of water for hydro-electric generation is the predominant interest, and conservation for domestic and industrial purposes is more important than irrigation. Conservation of water on farms is not practised to the same extent as on the mainland, probably because running streams and good rainfall are on a more generous scale. Provision of artificial storages (apart from house tanks) is rare, but progressive landowners are beginning to take advantage of modern plant, such as bulldozers, to provide small excavated storages on their properties. Underground water is of poor quality, but a small quantity which has been exploited to a limited extent only by bores and windmills exists over an area in the Midlands. Geological conditions do not appear to favour the utilization of underground water except on a minor scale.

(iii) *Administration.* On 1st September, 1958, a Rivers and Water Supply Commission was brought into operation with control over all natural waters. The Commission does not own the waters but may take them subject to existing rights, of which the most important are riparian rights. In addition to licensing the use of water, the Commission will carry on the functions of the Water, Sewerage and Drainage Board in supervising the construction of municipal water supply schemes. It will have similar functions in relation to river improvement and irrigation.

2. *Hydro-electricity.\**—Tasmania depends entirely on water for power development. The Hydro Electric Commission, the authority controlling the generation of electricity in Tasmania, conducts a continuous survey of the water power resources of the State assisted by modern methods such as aerial photography and geophysical exploration.

Much of the water potential is located on the Central Plateau with an area of about 1,500 square miles at an altitude of from 2,000 to 4,000 feet and subject to rainfall of from 30 inches a year in the east to 80 inches on the western perimeter. On the plateau, are a large number of lakes which provide the means for storage at low cost. These include Great Lake with an area of 58 square miles, Lake St. Clair and Lake Echo, each more than 12 square miles, and others of smaller area.

The Derwent River and its tributaries which flow south-easterly carry off by far the greater part of the water which falls on the plateau and these rivers are therefore the most abundant source of power. They have been the cheapest to develop to date and most of the existing generating stations are located on them.

The three main rivers running westerly from the plateau—the Arthur, Pieman and Gordon—have only a small portion of their catchment areas at high level, but they run through regions of high rainfall and their power potentials are considerable. However, because of inaccessibility and climate, development of these rivers may be rather expensive and so far has been deferred in favour of more convenient schemes.

Rivers draining from the plateau towards the north and north-west coast, including the Emu, Forth and Mersey, have small catchments at high levels and no natural storages.

Two other important water power sources, independent of the Central Plateau, are the South Esk River in the north and the Huon River in the south. A power station at Trevallyn, near Launceston, utilizes water from the South Esk. The Huon has a large low-level catchment in the high-rainfall area near the west coast. Storage could be provided on this river at a reasonable cost and, because of its proximity to Hobart, a future power station would have considerable value for peak load development.

3. *Industrial.*—Three principal industrial schemes have been installed privately. Australian Newsprint Mills Ltd. pump approximately 6 million gallons a day from the Derwent River at Lawitta for the Boyer Mills. Associated Pulp and Paper Mills Ltd. pump several million gallons a day from the Emu River at Burnie, and Titan Products Pty. Ltd. reticulate water from Chasm Creek to their factory at Heybridge. In addition the State has constructed a regional water scheme to serve the Australian Aluminium Production Commission's plant at Bell Bay on the River Tamar and to supply several municipalities with bulk water for domestic and industrial purposes.

\* See also Chapter VII.—Electric Power Generation and Distribution, p. 232.

A second regional water scheme draws water from the River Derwent at Lawitta to provide domestic and industrial supplies in five southern municipalities. Potential sources capable of greater development without storage exist on the Derwent, South Esk, Huon, Lake, Mersey and Forth Rivers. There is also a great reserve of untapped permanent streams in the western half of the State which is largely unsettled. Diversion to the eastern side of the watersheds is not regarded as practicable.

4. **Irrigation.**—There are no State irrigation projects, but preliminary inquiries about the possibility of establishing one in the Coal River Valley have been made. The Rivers and Water Supply Commission has power to undertake irrigation works but it is not known whether it will do so in the immediate future. The Water Act 1957 also provides for irrigation works to be undertaken by municipalities and by trusts constituted for the purpose. All systems operating are privately owned, and with one exception (at Bushy Park) are single-farm units. At Bushy Park, a small system serves a group of properties. The larger proportion of the area under irrigation is watered by gravitational systems and the remainder comprises areas devoted to vegetables and served by municipal water supplies. Irrigation in Tasmania was applied in 1957–58 to 15,321 acres devoted to: hops (1,381 acres); fruit (1,833 acres); pastures (9,316 acres); green fodder, etc. (620 acres); and other crops (2,171 acres).

### § 8. Northern Territory.

1. **Climate and Topography.**—Some particulars of the climate and main topographical features of the Northern Territory are given on page 1138 of Official Year Book No. 37, and in this issue information on climatic conditions will be found in Chapter II.—Physiography, and a brief outline of contour and physical characteristics in Chapter V.—The Territories of Australia.

2. **Administration.**—Under the Control of Waters Ordinance 1938–1955 of the Northern Territory, natural waters are vested in the Crown. Where a watercourse or lake forms a boundary of any land alienated by the Crown, the beds and banks are deemed to remain the property of the Crown (except in special cases) and diversion of water is prohibited except under prescribed conditions. There is a Water Use Branch in the Northern Territory Administration under the control of a Director. The functions of the Branch include systematic stream gauging, collection of data on surface and underground water supplies, planning of water use for irrigation and town water supplies, flood prevention and control.

3. **Underground Water.**—The marked seasonal rainfall over the whole of the Northern Territory is one of the basic factors affecting the pastoral industry which provides the bulk of the Territory's income. The inadequacy of surface water during the dry season underlines the importance of underground water supplies in the Territory where most of the cattle population is dependent on underground supplies for three to five months each year.

Rainfall is one of the factors controlling cattle population but geological features, controlling both soils and the storage of underground water, are even more important. In the northern-most portion of the Territory, which receives from 25 to 60 inches of seasonal rainfall per year, surface water supplies are, in general, adequate for the pastoral industry. Despite this, however, this area has a comparatively low carrying capacity for cattle and the pastoral industry is concentrated more in inland areas where feed retains more nutritive value in the winter despite dry conditions.

South from this well-watered northern-most portion, the Territory becomes progressively drier, with an annual average rainfall of only five inches at the margins of the Simpson Desert in the south-east corner. In the lighter rainfall areas, the search for potable underground water becomes exacting but, in general, the regions providing the best pastures—the Ord-Victoria Region, the Barkly Tablelands and smaller areas in the Alice Springs district—provide also sub-surface conditions suitable for the storage of water. This comes about largely because, in these areas, both pasture and water are related to flat lying or gently folded limestones or volcanics of Upper Proterozoic or Cambrian age, overlying the basement of older, more tightly folded, metamorphic rocks and granites which crop out over wide areas within the Territory.

In the Ord-Victoria Region, probably the best grass lands overlie volcanic rocks and extend over some 10,000 square miles. Ground water is obtained in shallow bores averaging 70 to 80 feet in depth and producing small supplies which range up to 1,500 gallons per hour. For the most part, water is stored in joints, faults or cracks in the rocks although in places sub-artesian conditions pertain and, on the whole, selection of bore sites is difficult. There are also small sedimentary basins in the region, some of which yield sub-artesian, and in places, artesian water and provide areas of good pastures.

The Barkly Tablelands, which extend into Western Queensland, overlie flat-lying limestone, sandstone and shale of the Barkly Basin. In most places, underground water is under pressure (sub-artesian) but no flowing bores are known. Sandstones and beds of

limestone with fractures and solution cavities provide a number of aquifers within the Basin. The hydraulic surface (to which pressure water will rise in bores) ranges between 500 and 600 feet above sea level and adequate supplies for the watering of stock are available at depths ranging from 150 to 400 feet from the surface. The water from over 90 per cent. of the bores is suitable for stock and over 50 per cent. of it is suitable for human consumption. Investigations by the Commonwealth Bureau of Mineral Resources indicate that underground water supplies will be more than sufficient for the future development of the pastoral industry on the Tablelands.

A review is being made of the information available concerning the number of bores and wells sunk in the Territory. Up to August, 1958, 1,778 bores and wells had been registered. Of these, 811 were on pastoral properties, 31 on native reserves, 8 for town water supplies and 8 on mining fields. It is not known how many of 343 registered bores drilled originally for defence and road construction purposes are still in use but it is probable that most of them have been abandoned. The number of registered stock route bores established by the Government is 162.

Regional surveys by the Bureau of Mineral Resources and the Commonwealth Scientific and Industrial Research Organization from 1947 to 1955 have established the existence of the valuable Barkly Basin of 57,000 square miles in the eastern part of the Territory and extensions of the Gulf Basin in the north-western part.

4. **Irrigation.**—There are no large-scale water conservation projects in the Territory with the exception of the Manton Dam (12,700 acre feet), which serves Darwin with a reticulated supply. Some water is drawn from the rising main between Manton Dam and Darwin for irrigation purposes, but the trend is for properties in this area to develop their own water supplies, either by boring or by pumping from watercourses or lakes. Investigations for a further dam site to augment Darwin's water supply and to provide reticulated water to properties without natural waters are expected in the near future. Hydrological investigations are being carried out by the Administration and a public company to determine the supply of water and the best methods of control and use in the potential rice-growing areas of the Territory. A total of 83 gauging stations has been established in the Territory of which thirteen have been abandoned. They are of various types, namely long-term automatic, short-term automatic, staff gauge-daily readings, and staff gauge-intermittent readings, of which 54 are associated with proposed rice growing areas. The remaining gauging stations have been located to assess the river water potential of the Territory. A further 16 stations are planned for installation in the immediate future. Agricultural activity in the Territory is not extensive, being confined to the Darwin, Adelaide River, Coomalie Creek, Daly River, Katherine River and Alice Springs areas with only small acreages being utilised.

The Katherine River appears to offer irrigation potentialities on the level soil below the township. Approximately 14 properties in and around Katherine are at present drawing water from the Katherine River for irrigation purposes, vegetables and pastures being the usual crops grown. The Katherine River passes through a gorge upstream of the town under conditions which appear suitable for dam construction. The Administration and the Commonwealth Scientific and Industrial Research Organization are investigating the potentialities of the Katherine area for agricultural production. The Administration is preparing a programme of extension work into saline water conversion under Territory conditions. For further particulars *see* page 1138 of Official Year Book No. 37.

## § 9. Papua and New Guinea.

1. **Rainfall.**—Rainfall in Papua and New Guinea varies considerably from approximately 250 inches near Lindenhafen (New Britain) and 231 inches at Kikori (Papua) to about 70 inches near Marienburg (New Guinea) and 40 inches at Port Moresby (Papua).

2. **General.**—For a general description of these territories *see* Chapter V.—The Territories of Australia, page 129, of this Year Book. Irrigation has not been developed on any organized basis owing to the availability of high rainfall and the nature of agricultural development.

The Territory of Papua and New Guinea is well served with large rivers deriving their water from heavy tropical rains and high mountains which rise to over 14,000 feet. However, complete data regarding water resources are not available.

The largest rivers in the Territory include the Fly (a description of which is given in Chapter XXVI. of Year Book No. 40), the Sepik (700 miles), the Ramu (450 miles), the Purari (300 miles) and the Markham (110 miles).

The main water conservation interest in New Guinea at present is the hydro-electric potential which is extensive. An outline of schemes at present in operation is given in the previous chapter.

## CHAPTER IX.

## POPULATION.

**NOTE.**—The figures shown throughout this chapter for the Census of 30th June, 1954, are the final results, and population estimates shown for the intercensal period 1947 to 1954 are revised figures which have been adjusted in accordance with these results.

In general, the remaining statistics in this chapter cover the year 1958. More detailed figures will be found in the annual bulletin, *Demography*.

## § 1. Population Statistics.

Population statistics relating to Australia or to the component States and Territories as at specific dates are of two types—

- (i) *Those ascertained by census enumeration.* These results attain a very high degree of accuracy and may generally be accepted without reservation.
- (ii) *Estimates derived by the application of vital and migration statistics to census data.* In general, three estimates are made for any specific date :
  - (a) Original estimates for dates subsequent to a census made before another census is taken. These estimates represent the population ascertained at the Census, plus natural increase and recorded net migration since the Census. As complete records of interstate migration are not available, the estimated State or Territory populations so derived are approximate, and are subject to revision when the actual population of each State or Territory is ascertained at the next Census. For some States such revisions were substantial after the Census of 1954.
  - (b) Two-stage revision of the original estimates for each newly completed intercensal period to adjust for the difference between the new census result and the comparable estimate. This is to bring intercensal estimates into line with the two census populations and thus effect adjustment for unrecorded movement of population in the intercensal period. The first revision is reconciled with preliminary census results and the second revision with final census results.

Final revised figures become the permanent population estimates. For purposes requiring a mean population for any twelve-month period such mean is calculated as described in § 4. As populations at specific dates are used in these calculations, consequential revisions are made in mean populations when the estimates for specific dates are revised as described above.

In accordance with this policy, all Australian population statistics shown in this issue of the Official Year Book for dates up to 30th June, 1954, and all mean populations for calendar years up to 1953 and financial years up to 1953–54 are final. Population statistics for dates or years subsequent to these are subject to revision when another census is taken.

Since the establishment of the Commonwealth Bureau of Census and Statistics, the populations of the States and Territories have been estimated in a comparable manner and attention has been given to the improvement of the basic demographic data from which the estimates are compiled. The principal source of error in early estimates lay in the migration records, both overseas and interstate, and efforts were directed towards their improvement. The 1911 Census disclosed an error in the precensal estimates equivalent to proportions of 14.5 per cent. and 10.0 per cent., respectively, of recorded male and female overseas departures from Australia. These proportions were used as adjusting factors to recorded overseas departures during the intercensal period 1911–21. These adjusting factors were reduced after the 1921 Census to 1 per cent. for males and 4.5 per cent. for females and were discontinued altogether after the 1933 Census. From the results of the 1954 Census, it appears that the accuracy of the records of overseas migration is such that, in future, little adjustment to recorded figures will be necessary for Australia as a whole.

It is improbable that the same degree of accuracy as has been attained in the record of overseas migration can be reached in the case of interstate movements. Records are made of interstate passengers by sea, rail and air, but it is impracticable, with occasional important exceptions, to record the movements by road.

## § 2. The Census.

1. **Census-taking.**—Although "musters" of the population were carried out at least annually from 1788 to 1825, the first regular census in Australia was not taken until 1828, when a count of the population of the Colony of New South Wales was made. Subsequent censuses were taken sporadically in the various colonies until 1881, when a census was taken on the same date throughout Australia.

In 1891 and 1901, census-taking was still in the hands of the Government Statisticians of the States, but, in 1911, under the provisions of the Commonwealth Census and Statistics Act, which provides for the enumeration to be made from one centre instead of by each State as formerly, the Commonwealth Statistician undertook the first census of the Commonwealth of Australia. The second was taken in 1921, the third in 1933, the fourth in 1947 and the fifth in 1954.

2. **Population recorded at Censuses.**—State and Territorial populations recorded at the Australia-wide censuses taken over the period 1881 to 1954 are shown in the following table. The figures relate to the political boundaries of the several States (or Colonies) and Territories as they existed at the date of each census, except that the Northern Territory has been shown separately from South Australia for three censuses prior to its transfer from that State. The years of formation of the separate Colonies and transfer of the Territories are shown in Chapter 1, § 4 and § 5. The total populations recorded at the censuses taken in the Colonies from 1828 to 1876 were shown in Official Year Book No. 40, page 326.

## POPULATION : AUSTRALIAN CENSUSES, 1881 TO 1954.

Census.	Population Enumerated (Excluding Full-blood Aboriginals).								
	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T. (a)	Aust.
<b>MALES.</b>									
3rd April, 1881 ..	410,211	451,623	125,325	146,183	17,062	61,162	3,347	..	1,214,913
5th April, 1891 ..	609,666	598,222	223,779	462,241	29,807	77,560	4,560	..	1,705,835
31st March, 1901	710,005	603,720	277,003	180,485	112,875	89,624	4,216	..	1,977,928
3rd April, 1911 ..	857,698	655,591	329,506	207,358	161,565	97,591	2,734	992	2,313,035
4th April, 1921 ..	1,071,501	754,724	398,969	248,267	177,278	107,743	2,821	1,567	2,762,870
30th June, 1933 ..	1,318,471	903,244	497,217	290,962	233,937	115,097	3,378	4,805	3,367,111
30th June, 1947 ..	1,492,211	1,013,867	567,471	320,031	258,076	129,244	7,378	9,092	3,797,370
30th June, 1954 ..	1,720,860	1,231,099	676,252	403,903	330,358	157,129	10,288	16,229	4,546,118
<b>FEMALES.</b>									
3rd April, 1881 ..	339,614	409,943	88,200	130,231	12,646	54,543	104	..	1,035,281
5th April, 1891 ..	517,471	541,866	169,939	153,292	19,275	69,107	338	..	1,471,988
31st March, 1901	644,841	597,350	221,126	177,861	71,249	82,851	595	..	1,795,873
3rd April, 1911 ..	789,036	659,960	276,307	201,200	120,549	93,620	576	722	2,141,970
4th April, 1921 ..	1,028,870	776,556	357,003	246,893	155,454	106,037	1,046	1,005	2,672,864
30th June, 1933 ..	1,282,376	917,017	450,317	289,987	204,915	112,502	1,472	4,142	3,262,728
30th June, 1947 ..	1,492,638	1,040,834	538,944	326,042	244,404	127,834	3,490	7,813	3,781,988
30th June, 1954 ..	1,702,669	1,221,242	642,007	393,191	309,413	151,623	6,181	14,086	4,440,412
<b>PERSONS.</b>									
3rd April, 1881 ..	749,825	861,566	213,525	276,414	29,708	115,705	3,451	..	2,250,194
5th April, 1891 ..	1,127,137	1,140,088	393,718	315,533	49,782	146,667	4,898	..	3,177,823
31st March, 1901	1,354,846	1,201,070	498,129	358,346	184,124	172,475	4,811	..	3,773,801
3rd April, 1911 ..	1,646,734	1,315,551	605,813	408,558	282,114	191,211	3,310	1,714	4,455,005
4th April, 1921 ..	2,100,371	1,531,280	755,972	495,160	332,732	213,780	3,867	2,572	5,435,734
30th June, 1933 ..	2,600,847	1,820,261	947,534	580,949	438,852	227,599	4,850	8,947	6,629,839
30th June, 1947 ..	2,984,838	2,054,701	1,106,415	646,073	502,480	257,078	10,868	16,905	7,579,358
30th June, 1954 ..	3,423,529	2,452,341	1,318,259	797,094	639,771	308,752	16,469	30,315	8,986,530

(a) Part of New South Wales prior to 1911.

The final results of the 1954 Census of the Australian External Territories will be found in § 13 of this chapter.

3. **Increase since 1881 Census.**—The increases in the populations of the several States and Territories and of Australia as a whole during the last seven intercensal periods are shown in the following table, which distinguishes the numerical increases, the proportional increases (which do not allow for the differences in the length of the intercensal periods) and the average annual rates of increase.

**POPULATION : INTERCENSAL INCREASES.**  
(EXCLUDING FULL-BLOOD ABORIGINALS.)

State or Territory.	1881-1891 (10 years).	1891-1901 (10 years).	1901-1911 (10 years).	1911-1921 (10 years).	1921-1933 (12½ years).	1933-1947 (14 years).	1947-1954 (7 years).
NUMERICAL INCREASE.							
New South Wales(a)	377,312	227,709	293,602	453,637	500,476	383,991	438,691
Victoria .. ..	278,522	60,982	114,481	215,729	288,981	234,440	397,640
Queensland .. .	180,193	104,411	107,684	150,159	191,562	158,881	211,844
South Australia ..	39,119	42,813	50,212	86,602	85,789	65,124	151,021
Western Australia ..	20,074	134,342	97,990	50,618	106,120	63,628	137,291
Tasmania .. ..	30,962	25,808	18,736	22,569	13,819	29,479	51,674
Northern Territory	1,447	-87	-1,501	557	983	6,018	5,601
Aust. Cap. Terr.(b)	..	..	..	858	6,375	7,958	13,410
Australia .. ..	927,629	595,978	681,204	980,729	1,194,105	949,519	1,407,172

PROPORTIONAL INCREASE—PER CENT.							
New South Wales(a)	50.32	20.20	21.67	27.55	23.83	14.76	14.70
Victoria .. ..	32.33	5.35	9.53	16.40	18.87	12.88	19.35
Queensland .. .	84.39	26.52	21.62	24.79	25.34	16.77	19.15
South Australia ..	14.15	13.57	14.01	21.20	17.33	11.21	23.38
Western Australia ..	67.57	269.86	53.22	17.94	31.89	14.50	27.32
Tasmania .. ..	26.76	17.60	10.86	11.80	6.46	12.95	20.10
Northern Territory	41.93	-1.78	-31.20	16.83	25.42	124.08	51.54
Aust. Cap. Terr.(b)	..	..	..	50.06	247.86	88.95	79.33
Australia .. ..	41.22	18.75	18.05	22.01	21.97	14.32	18.57

AVERAGE ANNUAL RATE OF INCREASE—PER CENT.							
New South Wales(a)	4.16	1.86	1.97	2.46	1.76	0.99	1.98
Victoria .. ..	2.84	0.52	0.91	1.53	1.42	0.87	2.56
Queensland .. .	6.31	2.38	1.98	2.24	1.86	1.11	2.53
South Australia ..	1.33	1.28	1.32	1.94	1.31	0.76	3.05
Western Australia ..	5.30	13.97	4.36	1.66	2.29	0.97	3.54
Tasmania .. ..	2.40	1.63	1.04	1.12	0.51	0.87	2.65
Northern Territory	3.56	-0.18	-3.67	1.57	1.87	5.93	6.12
Aust. Cap. Terr.(b)	..	..	..	4.14	10.71	4.65	8.70
Australia .. ..	3.51	1.73	1.67	2.01	1.63	0.96	2.46

(a) Includes Australian Capital Territory prior to 1911. (b) Part of New South Wales prior to 1911.

NOTE.—Minus sign (-) denotes decrease.

### § 3. Growth and Distribution of Population.

1. **Growth of Population.**—The table which follows shows the growth in the population of each sex in the various States and Territories as measured by the estimated population at 31st December in 1880 and thereafter at decennial intervals to 1950. Each year from 1953 to 1958 is included in order to show recent growth in greater detail.

**ESTIMATED POPULATION : 1880 TO 1958.**  
(EXCLUDING FULL-BLOOD ABORIGINALS.)

At 31st Dec.—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (a)	A.C.T. (b)	Australia.
MALES.									
1880	404,952	450,558	124,013	147,438	16,985	60,568	..	..	1,204,514
1890	602,704	595,519	223,252	166,049	28,854	76,453	..	..	1,692,831
1900	716,047	601,773	274,684	180,349	110,088	89,763	4,288	..	1,976,992
1910	858,181	646,482	325,513	206,557	157,971	98,866	2,738	..	2,296,308
1920	1,067,945	753,803	396,555	245,300	176,895	107,259	2,911	1,062	2,751,730
1930	1,294,419	892,422	481,559	288,618	232,868	113,505	3,599	4,732	3,311,722
1940(c)	1,402,297	947,037	536,712	297,885	248,734	123,650	6,337	7,856	3,570,508
1950	1,627,618	1,114,497	620,329	364,705	294,758	147,103	9,414	13,021	4,191,445
1953	1,713,639	1,212,060	666,348	397,610	326,372	161,305	9,854	16,090	4,503,278
1954	1,738,385	1,246,591	679,012	409,858	334,886	162,801	9,974	d16,502	4,598,009
1955	1,770,966	1,288,058	692,920	423,413	345,487	165,994	10,345	d17,746	4,714,929
1956	1,802,142	1,328,357	708,246	437,426	353,082	171,151	10,545	d19,772	4,830,721
1957	1,837,358	1,360,540	718,166	449,282	360,031	175,887	10,621	20,820	4,932,705
1958	1,865,917	1,394,876	729,148	459,522	366,356	179,818	10,681	22,957	5,029,275

For footnotes see next page.

ESTIMATED POPULATION : 1880 TO 1958—*continued.*  
(EXCLUDING FULL-BLOOD ABORIGINALS.)

At 31st Dec.—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (a)	A.C.T. (b)	Australia.
FEMALES.									
1880	336,190	408,047	87,027	128,955	12,576	54,222	..	..	1,027,017
1890	510,571	538,209	168,864	152,898	19,648	68,334	..	..	1,458,524
1900	644,258	594,440	219,163	176,901	69,879	83,137	569	..	1,788,347
1910	785,674	654,926	273,503	200,311	118,861	94,937	563	..	2,128,775
1920	1,023,777	774,106	354,069	245,706	154,428	105,493	1,078	910	2,659,567
1930	1,251,934	900,183	435,177	285,849	198,742	111,792	1,365	3,987	3,189,029
1940(c)	1,388,651	967,881	494,740	301,171	225,342	120,352	2,637	6,304	3,507,078
1950	1,613,439	1,122,685	585,089	358,138	277,891	143,230	5,006	10,558	4,116,036
1953	1,695,370	1,203,975	632,072	388,055	305,371	155,160	5,781	13,624	4,399,408
1954	1,723,928	1,234,286	643,740	398,385	314,529	156,710	6,166	d 14,642	4,492,386
1955	1,754,957	1,266,963	657,764	411,222	325,263	159,807	6,662	d 15,724	4,598,362
1956	1,786,202	1,304,266	670,701	424,486	331,753	161,659	7,308	d 16,238	4,702,613
1957	1,823,139	1,340,095	683,261	436,921	340,183	164,979	7,894	18,294	4,814,766
1958	1,859,769	1,376,043	695,670	448,470	347,227	166,727	8,441	19,996	4,922,343

PERSONS.									
1880	741,142	858,605	211,040	276,393	29,561	114,790	..	..	2,231,531
1890	1,113,275	1,133,728	392,116	318,947	48,502	144,787	..	..	3,151,355
1900	1,360,305	1,196,213	493,847	357,250	179,967	172,900	4,857	..	3,765,339
1910	1,643,855	1,301,408	599,016	406,868	276,832	193,803	3,301	..	4,425,083
1920	2,091,722	1,527,909	750,624	491,006	331,323	212,752	3,989	1,972	5,411,297
1930	2,546,353	1,792,605	916,736	574,467	431,610	225,297	4,964	8,719	6,500,751
1940(c)	2,790,948	1,914,918	1,031,452	599,056	474,076	244,002	8,974	14,160	7,077,586
1950	3,241,057	2,237,182	1,205,418	722,843	572,649	290,333	14,420	23,579	8,307,481
1953	3,409,009	2,416,035	1,298,420	785,665	631,743	316,465	15,635	29,714	8,902,686
1954	3,462,313	2,480,877	1,322,752	808,243	649,415	319,511	16,140	d 31,144	9,090,395
1955	3,525,923	2,555,021	1,350,684	834,635	670,750	325,801	17,007	d 33,470	9,313,291
1956	3,588,344	2,632,623	1,378,947	861,912	684,835	332,810	17,853	d 36,010	9,533,334
1957	3,660,497	2,700,635	1,401,427	886,203	700,214	340,866	18,515	39,114	9,747,471
1958	3,725,686	2,770,919	1,424,818	907,992	713,583	346,545	19,122	42,953	9,951,618

(a) Northern Territory figures included with South Australia prior to 1900. (b) Part of New South Wales prior to 1911. (c) Includes all defence personnel enlisted in Australia irrespective of movements subsequent to enlistment. (d) Revised estimates based on the June, 1957 Population Count of Canberra are as follows:—1954, males 16,458, females 14,848, persons 31,306; 1955, males 17,615, females 16,345, persons 33,960; 1956, males 19,553, females 17,275, persons 36,828.

Estimates of population for intercensal years are obtained in the manner outlined in § 1. The estimated population at 31st December each year from 1788 to 1946 on the same basis as in the table above was shown in *Demography*, Bulletin No. 67, 1949 and for the period 1881 to 1957 in *Demography*, Bulletin No. 75. A graph illustrating the growth of the population of Australia and of each State and Territory appears on page 297.

2. **Present Numbers.**—The population of Australia at 31st December, 1958, was estimated at 9,951,618 persons, of whom 5,029,275, or 50.54 per cent., were males and 4,922,343, or 49.46 per cent., were females. The increase during 1958 was 204,147, equal to 2.09 per cent., males having increased by 96,570, or 1.96 per cent., and females by 107,597 or 2.23 per cent. This increase was the result of an excess of births over deaths of 138,781, and a net gain by migration of 65,366 persons.

3. **Proportion of Area and Population, Density and Masculinity.**—The previous table shows the number of persons in each of the States and Territories at 31st December, 1958. In the following table the proportions of the total area and of the total population represented by each State and Territory are given, together with the density and the masculinity of the population.

DENSITY AND MASCULINITY OF POPULATION, 1958.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

State or Territory.	Proportion of Total Area. (Per cent.)	Proportion of Estimated Population, 31st December, 1958. (Per cent.)			Density. (a)	Masculinity. (b)
		Males.	Females.	Persons.		
New South Wales	10.40	37.10	37.78	37.44	12.04	100.33
Victoria .. .. .	2.96	27.73	27.96	27.84	31.53	101.37
Queensland .. .. .	22.54	14.50	14.13	14.32	2.13	104.81
South Australia .. .. .	12.78	9.14	9.11	9.13	2.39	102.46
Western Australia .. .. .	32.81	7.28	7.05	7.17	0.73	105.51
Tasmania .. .. .	0.88	3.58	3.39	3.48	13.22	107.85
Northern Territory .. .. .	17.60	0.21	0.17	0.19	0.04	126.54
Australian Capital Territory .. .. .	0.03	0.46	0.41	0.43	45.74	114.81
<b>Australia .. .. .</b>	<b>100.00</b>	<b>100.0</b>	<b>100.00</b>	<b>100.00</b>	<b>3.35</b>	<b>102.17</b>

(a) Number of persons per square mile.

(b) Number of males per 100 females.

Additional information regarding density and masculinity of population appears in later sections of this chapter.

4. **Urban and Rural Distribution.**—Particulars of the distribution of the population amongst metropolitan urban, other urban and rural areas in each State and Territory are available only from a census. Particulars of the distribution at the 1947 Census were shown in Official Year Book No. 39, pages 521–524.

At the census of 30th June, 1954, the number of persons and the proportion of the total population of Australia in each division were :—metropolitan urban 4,845,230, 53.92 per cent. ; other urban 2,230,039, 24.81 per cent. ; rural 1,887,892, 21.01 per cent. Migratory population (23,369) accounted for the remaining 0.26 per cent.

Of the States, Victoria had the largest proportion of population residing in the metropolitan area (62.15 per cent.) but was closely followed in this respect by South Australia (60.66 per cent.). Percentages for the other States were:—Western Australia, 54.50; New South Wales, 54.42; Queensland, 38.10; and Tasmania, 30.84.

A feature of the metropolitan population is its higher femininity as compared with the population of extra-metropolitan areas. In 1933, 52.5 per cent. of the metropolitan population was composed of females ; in 1947, the proportion had fallen slightly to 51.9 per cent., being highest in Tasmania at 52.3 per cent. ; at the Census of 30th June, 1954, the proportion had fallen to 51.0 per cent., there being little difference in the proportions as between the several States. The proportion of females in extra-metropolitan areas was between 46 per cent. and 48 per cent. at each of these three censuses.

Metropolitan Urban Divisions include the capital cities of the States and (included in 1954 for the first time) Canberra, the capital city of Australia, the boundaries of the capital cities being determined for census purposes by the Statisticians of the States in collaboration with the Commonwealth Statistician, and normally include the city proper and all contiguous urban areas. In order to conform to the growth of the metropolitan urban population, the boundaries are reviewed at each census and adjustments made, wherever necessary, to embrace contiguous urban areas that have developed since the previous census. Amendments were made prior to the Census of 1954 to the boundaries of the Metropolitan Urban Divisions in New South Wales, Victoria and Tasmania.

*Other Urban Divisions comprise the capital city of the Northern Territory, all separately incorporated cities and towns, and all other towns with a population of 1,000 persons or more (750 in Tasmania), outside the Metropolitan Urban Divisions. The inclusion in the Other Urban Divisions in 1954 of the larger towns not separately incorporated was a significant departure from the classification adopted at previous censuses, when these towns (in all States except Tasmania) were included in the Rural Divisions, and the Other Urban Divisions (or Provincial Urban Divisions) were restricted to provincial separately incorporated cities and towns only.*

Rural Divisions comprise the remaining portions of each State and Territory, and are affected by the intercensal changes in the areas of the Metropolitan Urban and Other Urban Divisions. As already mentioned, the Rural Divisions in 1954 exclude the towns of 1,000 persons or more (750 in Tasmania) which were not separately incorporated.

The term "Migratory" refers to persons, not elsewhere enumerated, who at midnight between 30th June and 1st July, 1954, were travelling on ships in Australian waters or on long-distance trains or aircraft.

As particulars of the population in urban and rural divisions for the 1947 Census are not directly available on the basis of the 1954 composition of these divisions, adjustments have been made to the 1947 figures in order to provide approximate comparisons with 1954 for the purposes of the following table. Adjustments to 1947 Metropolitan figures have been made in New South Wales, Victoria, Tasmania and the Australian Capital Territory, while in all States and in the Northern Territory adjustments have been made to allow for the transfer of towns of 1,000 persons or more from Rural to Other Urban.

**URBAN AND RURAL POPULATION(a) : CENSUS, 30th JUNE, 1954.**  
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Division.	1954 Census.			Proportion of Total Population of State. (Per cent.)		Percentage Increase since the 1947 Census.
	Males.	Females.	Persons.	1947 Census.	1954 Census.	
<b>NEW SOUTH WALES.</b>						
Urban—						
Metropolitan	909,978	953,183	1,863,161	55.14	54.42	13.20
Other ..	485,128	480,259	965,387	27.19	28.20	18.94
Rural ..	319,562	268,549	588,111	17.42	17.18	13.11
Migratory ..	6,192	678	6,870	0.25	0.20	-6.43
<i>Total ..</i>	<i>1,720,860</i>	<i>1,702,669</i>	<i>3,423,529</i>	<i>100.00</i>	<i>100.00</i>	<i>14.70</i>
<b>VICTORIA.</b>						
Urban—						
Metropolitan	747,712	776,399	1,524,111	62.91	62.15	17.90
Other ..	233,083	236,980	470,063	18.08	19.17	26.52
Rural ..	243,809	206,317	450,126	18.82	18.35	16.42
Migratory ..	6,495	1,546	8,041	0.19	0.33	108.80
<i>Total ..</i>	<i>1,231,099</i>	<i>1,221,242</i>	<i>2,452,341</i>	<i>100.00</i>	<i>100.00</i>	<i>19.35</i>
<b>QUEENSLAND.</b>						
Urban—						
Metropolitan	244,904	257,416	502,320	36.34	38.10	24.95
Other ..	230,157	229,923	460,080	34.18	34.90	21.65
Rural ..	198,605	154,283	352,888	29.31	26.77	8.82
Migratory ..	2,586	385	2,971	0.17	0.23	57.45
<i>Total ..</i>	<i>676,252</i>	<i>642,007</i>	<i>1,318,259</i>	<i>100.00</i>	<i>100.00</i>	<i>19.15</i>
<b>SOUTH AUSTRALIA.</b>						
Urban—						
Metropolitan	237,651	245,857	483,508	59.20	60.66	26.42
Other ..	55,853	54,254	110,107	13.69	13.81	24.48
Rural ..	108,199	92,934	201,133	26.85	25.23	15.95
Migratory ..	2,200	146	2,346	0.26	0.30	37.92
<i>Total ..</i>	<i>403,903</i>	<i>393,191</i>	<i>797,094</i>	<i>100.00</i>	<i>100.00</i>	<i>23.38</i>
<b>WESTERN AUSTRALIA.</b>						
Urban—						
Metropolitan	171,832	176,815	348,647	54.24	54.50	27.93
Other ..	53,868	51,550	105,418	16.68	16.48	25.75
Rural ..	102,753	80,686	183,439	28.49	28.67	28.15
Migratory ..	1,905	362	2,267	0.59	0.35	-23.95
<i>Total ..</i>	<i>330,358</i>	<i>309,413</i>	<i>639,771</i>	<i>100.00</i>	<i>100.00</i>	<i>27.32</i>

(a) See letterpress preceding this table for definitions of urban, rural, etc., and for reference to the adjustments to 1947 Census figures in order to provide approximate comparisons on the 1954 Census basis.

NOTE.—Minus sign (—) denotes decrease.

## URBAN AND RURAL POPULATION(a): CENSUS, 30TH JUNE, 1954—continued.

Division.	1954 Census.			Proportion of Total Population of State. (Per cent.)		Percentage Increase since the 1947 Census.
	Males.	Females.	Persons.	1947 Census.	1954 Census.	
<b>TASMANIA.</b>						
Urban—						
Metropolitan	46,544	48,662	95,206	30.19	30.84	22.67
Other ..	53,521	54,607	108,128	33.45	35.02	25.74
Rural ..	56,418	48,350	104,768	36.09	33.93	12.93
Migratory ..	646	4	650	0.27	0.21	-7.54
<i>Total</i> ..	<i>157,129</i>	<i>151,623</i>	<i>308,752</i>	<i>100.00</i>	<i>100.00</i>	<i>20.10</i>
<b>NORTHERN TERRITORY.</b>						
Urban—						
Metropolitan	..	..	..	..	..	..
Other ..	6,378	4,478	10,856	65.14	65.92	53.35
Rural ..	3,692	1,697	5,389	33.59	32.72	47.60
Migratory ..	218	6	224	1.27	1.36	62.32
<i>Total</i> ..	<i>10,288</i>	<i>6,181</i>	<i>16,469</i>	<i>100.00</i>	<i>100.00</i>	<i>51.54</i>
<b>AUSTRALIAN CAPITAL TERRITORY.</b>						
Urban—						
Metropolitan	15,076	13,201	28,277	89.65	93.28	86.57
Other ..	..	..	..	..	..	..
Rural ..	1,153	885	2,038	10.35	6.72	16.52
Migratory ..	..	..	..	..	..	..
<i>Total</i> ..	<i>16,229</i>	<i>14,086</i>	<i>30,315</i>	<i>100.00</i>	<i>100.00</i>	<i>79.33</i>
<b>AUSTRALIA.</b>						
Urban—						
Metropolitan	2,373,697	2,471,533	4,845,230	53.94	53.92	18.51
Other ..	1,117,988	1,112,051	2,230,039	24.10	24.81	22.08
Rural ..	1,034,191	853,701	1,887,892	21.71	21.01	14.72
Migratory ..	20,242	3,127	23,369	0.25	0.26	25.62
<i>Total</i> ..	<i>4,546,118</i>	<i>4,440,412</i>	<i>8,986,530</i>	<i>100.00</i>	<i>100.00</i>	<i>18.57</i>

(a) See letterpress preceding this table for definitions of urban, rural, etc., and for reference to the adjustments to 1947 Census figures in order to provide approximate comparisons on the 1954 Census basis.

NOTE.—Minus sign (—) denotes decrease.

5. Capital Cities : Australia and Other Countries.—In Australia there is an abnormal concentration of population in the capital cities. A comparison with the capitals of various other countries is given in the following table.

POPULATION OF CAPITAL CITIES: AUSTRALIA AND OTHER COUNTRIES.  
(‘000.)

State or Country.	Metropolis.	Year.	Metro- politan Popu- lation.	Country.	Metropolis.	Year.	Metro- politan Popu- lation.
New South Wales	Sydney	1958	a 2,017	Brazil	Rio de Janeiro	1957	2,940
Victoria	Melbourne	1958	a 1,726	Czechoslovakia	Prague	1956	979
Queensland	Brisbane	1958	(a) 555	Denmark	Copenhagen	1955	960
South Australia	Adelaide	1958	(a) 548	Egypt	Cairo	1953	2,447
Western Australia	Perth	1958	(a) 382	France	Paris	1954	2,850
Tasmania	Hobart	1958	(a) 105	Germany	Berlin	1956	3,345
Australian Cap. Ter.	Canberra	1958	(a) 39	Greece	Athens(c)	1951	1,379
England	London(b)	1956	8,270	Hungary	Budapest(d)	1956	1,850
Scotland	Edinburgh	1956	467	Italy	Rome	1956	1,829
Northern Ireland	Belast	1956	445	Japan	Tokyo(e)	1956	8,472
Ireland, Republic of.	Dublin	1956	539	Netherlands	Amsterdam	1957	871
Canada	Ottawa	1956	345	Norway	Oslo	1956	451
New Zealand	Wellington	1957	141	Poland	Warsaw	1957	1,031
Union of South Africa	Capetown	1957	709	Portugal	Lisbon	1956	835
Argentina	Buenos Aires	1956	3,674	Spain	Madrid	1957	1,849
Belgium	Brussels	1955	982	Sweden	Stockholm	1956	786
				U.S.A.	Washington	1956	859

(a) Excludes full-blood aboriginals. (b) Greater London. (c) Greater Athens, including Piraeus. (d) Greater Budapest. (e) Greater Tokyo.

6. Principal Urban Areas.—The following table shows the estimated population of the principal urban incorporated areas (population 6,000 or more) in each State and Territory of Australia at the latest date available.

ESTIMATED POPULATION OF PRINCIPAL URBAN INCORPORATED AREAS :  
AUSTRALIA.  
(EXCLUDING FULL-BLOOD ABORIGINALS.)

City or Town.	Popu- lation.	City or Town.	Popu- lation.	City or Town.	Popu- lation.
<b>New South Wales.(a)</b>		<b>Victoria.(a)</b>		<b>South Australia.</b>	
Sydney and Suburbs(b) ..	2,016,620	Melbourne and Suburbs(b)	1,726,100	Adelaide and Suburbs(a)(b) ..	548,000
Newcastle and Suburbs(c) ..	192,940	Geelong and Suburbsc	85,190	Port Pirie ..	(d)14,223
Greater Wollongong ..	112,390	Ballarat and Suburbsc	52,450	Mount Gambier ..	(d)10,331
Greater Cessnock ..	40,230	Rendigo and Suburbsc	40,310	Whyalla ..	(d) 8,598
Broken Hill ..	33,720	Warrnambool ..	13,910	Port Augusta ..	(d) 6,704
Blue Mountains	23,640	Moe ..	13,560		
Maitland ..	23,030	Shepparton ..	12,470		
Penrith ..	22,020	Wangaratta ..	12,210	<b>Western Australia.(a)</b>	
Wagga Wagga ..	20,900	Mildura ..	12,020	Perth and Suburbs(b)	382,000
Goulburn ..	20,870	Hamilton ..	9,280	Kalgoorlie and Suburbs(c)	22,700
Lismore ..	19,110	Colac ..	8,940	Bunbury ..	11,502
Orange ..	19,030	Horsham ..	8,690	Geraldton ..	9,530
Albury ..	18,400	Ararat ..	7,880	Albany ..	9,403
Tamworth ..	18,400	Sale ..	7,330	Northam ..	6,509
Bathurst ..	17,930	Maryborough ..	7,300		
Bathurst ..	16,990	Benalla ..	7,220	<b>Tasmania.(a)</b>	
Grafton ..	15,340	Castlemaine ..	7,020	Hobart and Suburbsb	105,110
Lithgow ..	14,850	Echuca ..	6,130	Launceston and Suburbs(c)	55,950
Dubbo ..	13,240			Burnie(e) ..	(d)11,193
Campbelltown ..	12,440	<b>Queensland.(a)</b>		Devonport(e) ..	(d)10,597
Windsor ..	10,930	Brisbane and Suburbsb	555,000		
Taree ..	10,150	Toowoomba ..	46,600	<b>Northern Territory.(a)</b>	
Armidale ..	9,390	Townsville ..	43,800	Darwin(f) ..	8,066
Parke ..	8,380	Rockhampton ..	43,400		
Queanbeyan ..	8,380	Ipwich ..	42,300	<b>Australian Capital Territory.(a)</b>	
Casino ..	8,360	South Coast ..	23,700	Canberra(b) ..	39,061
Cooma ..	8,260	Cairns ..	23,400		
Inverell ..	8,080	Bundaberg ..	22,200		
Kempsey ..	8,000	Maryborough ..	19,900		
Shellharbour ..	7,700	Redcliffe ..	16,730		
Forbes ..	6,730	Mackay ..	15,100		
Cowra ..	6,150	Gympie ..	10,500		
Muswellbrook ..	6,090	Warwick ..	9,850		
Cootamundra ..	6,000	Gladstone ..	7,320		
		Dalby ..	6,900		
		Charters Towers ..	6,780		

(a) At 30th June, 1958. (b) Metropolitan Area. (c) Entire Urban Area. (d) Census, 30th June, 1954. (e) Non-municipal town. (f) Municipality of Darwin created 28th June, 1957.

7. **Urban Areas Outside Metropolitan Areas.**—The proportion of the total population of each State which was located in incorporated urban provincial areas at the 1933 and 1947 Censuses was shown in Official Year Book No. 39, pages 522-3. In Official Year Book No. 40, page 334, a table was given showing aggregate population at the 1947 Census of all cities and towns outside the metropolitan area of each State with 2,000 or more and 3,000 or more inhabitants, irrespective of whether such centres were incorporated separately or not. In addition, the proportion of the aggregate population of these cities and towns to the total population of the State was shown. The following table shows similar particulars for the 1954 Census.

**AGGREGATE POPULATION OF CITIES AND TOWNS OF SPECIFIED SIZE :  
CENSUS, 30th JUNE, 1954.**

(EXCLUDING FULL-BLOOD ABORIGINALS.)

State or Territory.	Cities and Towns outside Metropolitan Area with Population of—					
	2,000 and over.			3,000 and over.		
	Number.	Population.	Proportion of Total Population.	Number.	Population.	Proportion of Total Population.
			%			%
New South Wales(a) ..	98	881,391	25.75	67	806,373	23.55
Victoria .. .. .	56	415,690	16.95	40	376,347	15.35
Queensland .. ..	41	404,520	30.69	29	374,328	28.40
South Australia ..	14	74,502	9.35	9	62,008	7.78
Western Australia(b) ..	13	82,139	12.84	7	67,440	10.54
Tasmania .. .. .	8	89,003	28.83	6	84,312	27.31
Northern Territory ..	2	10,856	65.92	1	8,071	49.01
Australian Capital Territory (c) .. ..	..	..	..	..	..	..
<b>Total .. .. .</b>	<b>232</b>	<b>1,958,101</b>	<b>21.79</b>	<b>159</b>	<b>1,778,879</b>	<b>19.79</b>

(a) Excludes that part of Liverpool Municipality outside the Metropolitan Area of Sydney.

(b) Excludes that part of Fremantle suburbs outside the Metropolitan Area of Perth.

(c) The only city or town is Canberra, the capital city of Australia, classed as metropolitan.

In the foregoing table, "Urban Areas" comprising two or more Local Government Areas or portions thereof are treated as units. The "Urban Areas" so treated are: in New South Wales, Newcastle; in Victoria, Ballarat, Bendigo, and Geelong; in Western Australia, Kalgoorlie; and in Tasmania, Launceston. The figures in each instance include the populations of the adjoining areas which, together with the city proper, constitute the entire "Urban Area".

The numbers of towns of 2,000 or more inhabitants in New South Wales and Victoria, and of 3,000 or more in New South Wales, show considerable decreases as compared with the figures for the 1947 Census. This is due to the absorption, by the increased metropolitan areas, of towns within these ranges which were formerly outside the metropolitan limits, and, in New South Wales, to similar absorptions by the City of Blue Mountains. Greater Wollongong and Newcastle Urban Area.

3. **Principal Cities in the World.**—The following table shows the population of the world's largest cities at the latest available date:—

**POPULATION OF THE WORLD'S LARGEST CITIES.**

(Details for Commonwealth countries are printed in italics.)

City.	Country.	Year.	City Population ('000).	City.	Country.	Year.	City Population ('000).
Tokyo(a)	Japan	1956	8,472	Canton	China	1950	1,496
London(b)	England	1956	8,270	Barcelona	Spain	1957	1,429
New York	U.S.A.	1957	7,795	Athens(e)	Greece	1931	1,379
Shanghai	China	1953	6,204	Toronto(f)	Canada	1956	1,358
Moscow	U.S.S.R.	1956	4,847	Milan	Italy	1956	1,355
Chicago	U.S.A.	1950	3,621	Nagoya	Japan	1955	1,337
Buenos Aires	Argentina	1956	3,674	Bucharest	Romania	1956	1,237
Berlin	Germany	1956	3,345	Istanbul	Turkey	1955	1,215
Bombay	India	1954	3,211	Kyoto	Japan	1955	1,204
Leningrad(c)	U.S.S.R.	1956	3,182	Bangkok	Thailand	1954	1,202
Sao Paulo	Brazil	1957	3,150	Yokohama	Japan	1955	1,144
Rio de Janeiro	Brazil	1957	2,940	Manila	Philippines	1955	1,118
Paris	France	1954	2,850	Birmingham	England	1956	1,111
Peking	China	1953	2,768	Alexandria	Egypt	1953	1,105
Tientsin	China	1953	2,694	Naples	Italy	1956	1,097
Mexico City	Mexico	1954	2,554	Lima(g)	Peru	1956	1,086
Calcutta	India	1951	2,549	Glasgow	Scotland	1956	1,082
Osaka	Japan	1955	2,547	Lia-ta	China	1950	1,054
Cairo	Egypt	1953	2,447	Pusan	Korea, South	1955	1,049
Los Angeles	U.S.A.	1956	2,244	Chungking	China	1950	1,039
Philadelphia	U.S.A.	1950	2,072	Warsaw	Poland	1957	1,031
Sydney and Suburbs	Australia	1958	2,017	Johannesburg	South Africa	1957	1,030
Djakarta	Indonesia	1956	1,892	Nanking	China	1950	1,020
Detroit	U.S.A.	1950	1,850	Karachi	Pakistan	1951	1,009
Budapest	Hungary	1956	1,850	Wuhan	China	1950	1,008
Madrid	Spain	1957	1,849	Victoria	Hong Kong	1956	1,000
Rome	Italy	1956	1,829	Kiev	U.S.S.R.	1956	991
Saigon-Cholon	Viet-Nam, Sth.	1956	1,794	Brussels(h)	Belgium	1955	982
Hamburg	Germany	1956	1,760	Kobe	Japan	1955	979
Melbourne and Suburbs	Australia	1958	1,726	Prague	Czechoslovakia	1956	979
Vienna	Austria	1956	1,623	Munich	Germany	1956	975
Montreal(d)	Canada	1956	1,621	Caracas	Venezuela	1955	972
Madras	India	1954	1,596	Copenhagen	Denmark	1955	960
Seoul	Korea, South	1955	1,575	Surabaya	Indonesia	1956	950
Shenyang	China	1950	1,551	Baltimore	U.S.A.	1950	950
Santiago	Chile	1954	1,547	Delhi	India	1951	915
Teheran	Iran	1956	1,513	Cleveland	U.S.A.	1950	915
				Bogota	Colombia	1955	903
				Singapore	Singapore	1956	897

(a) Greater Tokyo. (b) Greater London. (c) Greater Leningrad. (d) Greater Montreal. (e) Greater Athens. (f) Greater Toronto. (g) Greater Lima. (h) Includes Shaerbeek

**§ 4. Mean Population.**

1. **General.**—Mean populations are calculated for twelve-month periods to provide a satisfactory average basis for calculations requiring allowance for the continuous change in population figures during such periods.

2. **Method of Calculation.**—From 1901 onwards the mean population for any year has been calculated by the formula:—

$$\text{Mean Population} = \frac{a + 4b + 2c + 4d + e}{12}$$

where *a*, *b*, *c*, *d* and *e*, respectively, are the populations at the end of the quarter immediately preceding the year and at the end of each of the four succeeding quarters; e.g., in the case of a calendar year, 31st December of the preceding year and 31st March, 30th June, 30th September and 31st December of the year under consideration. This formula gives a close approximation to the mean of a theoretical population progressing smoothly through the five values *a*, *b*, *c*, *d*, *e*.

3. Results.—(i) *Calendar Years.* The following table shows the mean population of each State and Territory for the calendar years 1949 to 1958:—

## MEAN POPULATION : CALENDAR YEARS.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Year ended 31st Dec.—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1949 ..	3,093,277	2,142,529	1,155,638	680,287	532,603	270,327	13,068	21,161	7,908,890
1950 ..	3,193,208	2,209,013	1,191,081	709,475	557,878	278,785	14,309	23,545	8,177,294
1951 ..	3,279,415	2,276,272	1,223,719	732,537	580,317	288,294	15,179	24,658	8,420,391
1952 ..	3,341,476	2,343,610	1,255,896	755,042	600,615	298,361	15,087	26,570	8,636,657
1953 ..	3,386,556	2,395,851	1,287,231	776,355	621,034	306,318	15,534	28,724	8,817,603
1954 ..	3,428,488	2,453,458	1,313,055	796,361	640,140	311,128	16,214	a 30,383	9,899,227
1955 ..	3,492,385	2,526,275	1,338,995	820,143	658,747	316,153	17,040	a 32,412	9,202,150
1956 ..	3,555,854	2,604,283	1,366,496	848,531	677,317	322,216	17,896	a 34,698	9,427,291
1957 ..	3,622,557	2,673,654	1,392,384	874,159	691,723	330,200	18,730	a 37,631	9,641,038
1958 ..	3,693,282	2,740,286	1,414,362	896,933	705,600	337,735	19,226	41,110	9,848,534

(a) Revised estimates based on the June, 1957 Population Count of Canberra are as follows:—1954, 30,424; 1955, 32,738; 1956, 35,352; 1957, 37,999.

(ii) *Financial Years.* The following table shows the mean population of each State and Territory for the years ended 30th June, 1949 to 1958:—

## MEAN POPULATION : FINANCIAL YEARS.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1949 ..	3,049,051	2,115,830	1,140,816	669,828	521,932	266,518	12,539	19,965	7,796,479
1950 ..	3,145,699	2,174,844	1,173,232	694,582	545,134	274,493	13,737	22,571	8,044,292
1951 ..	3,238,406	2,242,882	1,207,194	721,845	570,346	283,526	14,827	24,017	8,303,043
1952 ..	3,311,840	2,309,708	1,239,868	743,310	589,887	293,340	15,131	25,545	8,528,629
1953 ..	3,366,358	2,372,366	1,272,244	766,538	611,191	302,529	15,241	27,721	8,734,188
1954 ..	3,405,414	2,422,839	1,300,464	785,981	630,705	309,416	15,930	29,595	8,900,344
1955 ..	3,459,538	2,488,115	1,325,336	807,501	648,930	312,987	16,536	a31,249	9,090,192
1956 ..	3,524,379	2,564,849	1,352,629	834,465	669,040	319,192	17,474	a33,642	9,315,670
1957 ..	3,588,033	2,640,105	1,380,466	861,373	684,518	326,137	18,340	a36,013	9,534,985
1958 ..	3,658,325	2,707,192	1,403,279	885,973	698,548	334,105	19,033	39,283	9,745,738

(a) Revised estimates based on the June, 1957 Population Count of Canberra are as follows:—1955, 31,411; 1956, 34,132; 1957, 36,749.

## § 5. Elements of Increase.

1. *Natural Increase.*—(i) *General.* The two factors which contribute to the growth of a population are the "natural increase", i.e., the excess of births over deaths, and the "net migration", i.e., the excess of arrivals over departures. In earlier issues of the Official Year Book, particulars of the natural increase from 1861 were given for each sex and for each State and Territory (see No. 22, p. 899). Figures for more recent years will be found in *Demography*, Bulletin No. 75.

During the present century, the rate of natural increase grew until it reached its maximum at a rate of 17.44 per thousand of mean population in 1914, but it steadily declined after that year to 7.07 in 1934. There was little change until 1939, but during the war and in the post-war period the rate rose sharply, reaching 14.37 in 1947. In 1958 the rate was 14.09.

In the following table particulars of the natural increase in each State and Territory are given for each sex for each five-year period from 1926 to 1955 and for each of the years 1954 to 1958.

**POPULATION : NATURAL INCREASE (EXCESS OF BIRTHS OVER DEATHS)..**  
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
<b>MALES.</b>									
1926-30 ..	72,430	43,756	25,645	14,583	11,245	7,001	-131	175	174,704
1931-35 ..	51,566	25,286	20,627	8,686	8,576	5,810	-93	270	120,728
1936-40(a)	49,092	26,141	23,145	9,187	9,409	6,040	39	397	123,450
1941-45(a)	68,071	42,650	31,871	15,563	12,391	7,234	15	740	178,535
1946-50(a)	93,564	63,984	41,580	24,206	19,367	11,356	412	1,583	256,052
1951-55 ..	97,898	76,291	46,700	26,672	24,658	12,767	767	1,932	287,685
1954 ..	19,197	15,950	9,259	5,455	4,933	2,426	178	370	57,768
1955 ..	19,411	16,902	10,020	5,313	5,330	2,771	158	357	60,262
1956 ..	20,043	17,253	9,623	5,465	5,605	2,750	201	457	61,397
1957 ..	22,145	17,884	10,416	5,924	5,612	2,851	252	494	65,578
1958 ..	22,530	18,738	10,714	5,919	5,262	2,915	260	569	66,907
<b>FEMALES.</b>									
1926-30 ..	80,733	44,417	31,128	15,407	14,406	6,893	126	203	193,313
1931-35 ..	60,300	28,216	26,036	9,228	12,352	5,953	156	280	142,521
1936-40(a)	60,628	28,464	28,991	10,057	13,626	6,574	220	437	148,997
1941-45(a)	75,809	42,538	36,709	15,654	16,029	7,420	232	826	195,217
1946-50(a)	102,959	63,744	46,650	24,605	22,273	11,667	652	1,574	274,124
1951-55 ..	110,115	78,058	52,282	27,641	27,650	13,219	1,029	2,023	312,017
1954 ..	21,484	16,156	10,573	5,593	5,631	2,648	229	369	62,683
1955 ..	22,443	16,907	11,025	5,645	5,914	2,829	238	378	65,379
1956 ..	21,607	17,254	10,600	5,906	5,739	2,841	248	453	64,648
1957 ..	23,994	18,449	11,668	6,036	6,015	2,914	279	472	69,827
1958 ..	25,165	18,906	11,703	6,385	5,915	2,945	331	524	71,874
<b>PERSONS.</b>									
1926-30 ..	153,163	88,173	56,773	29,990	25,651	13,894	-5	378	368,017
1931-35 ..	111,866	53,502	46,663	17,914	20,928	11,763	63	550	263,249
1936-40(a)	109,720	54,605	52,136	19,244	23,035	12,614	259	834	272,447
1941-45(a)	143,880	85,188	68,580	31,217	28,420	14,654	247	1,566	373,752
1946-50(a)	196,523	127,728	88,230	48,811	41,640	23,023	1,064	3,157	530,176
1951-55 ..	208,013	154,349	98,982	54,313	52,308	25,986	1,796	3,955	599,702
1954 ..	40,681	32,106	19,832	11,048	10,564	5,074	407	739	120,451
1955 ..	41,854	33,809	21,045	10,958	11,244	5,600	396	735	125,641
1956 ..	41,650	34,507	20,223	11,371	11,344	5,591	449	910	126,045
1957 ..	46,139	36,333	22,084	11,960	11,627	5,765	531	966	135,405
1958 ..	47,695	37,644	22,417	12,304	11,177	5,860	591	1,093	138,781

For footnotes see next page.

NOTE.—Minus sign (-) denotes excess of deaths over births.

POPULATION : NATURAL INCREASE (EXCESS OF BIRTHS OVER DEATHS)—  
*continued.*

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
RATE OF NATURAL INCREASE(b)—PERSONS.									
1926-30 ..	12.51	10.10	12.84	10.58	12.63	12.85	-0.22	9.60	11.72
1931-35 ..	8.61	5.89	9.88	6.17	9.54	10.33	2.54	11.96	7.95
1936-40(c)	8.06	5.84	10.40	6.48	9.94	10.66	8.27	14.14	7.89
1941-45(c)	10.05	8.64	13.04	10.17	11.86	12.02	4.97	21.85	10.32
1946-50(c)	12.90	12.14	15.56	14.64	16.01	17.41	17.50	32.61	13.65
1951-55 ..	12.29	12.87	15.42	14.00	16.87	17.09	22.72	27.71	13.61
1954 ..	11.87	13.09	15.10	13.87	16.50	16.31	25.10	d24.32	13.40
1955 ..	11.98	13.38	15.72	13.36	17.07	17.71	23.24	d22.68	13.65
1956 ..	11.71	13.25	14.80	13.40	16.75	17.35	25.09	d26.23	13.37
1957 ..	12.74	13.59	15.86	13.68	16.81	17.46	28.35	d25.67	14.04
1958 ..	12.91	13.74	15.85	13.72	15.84	17.35	30.74	26.59	14.09

(a) Excess of births over civilian deaths from September, 1939 to June, 1947. (b) Excess of births over deaths per 1,000 of mean population. (c) Excess of births over civilian deaths per 1,000 of mean population from September, 1939 to June, 1947. (d) Rates based on the revised estimates of mean population for the Australian Capital Territory consequent on the June, 1957 Population Count of Canberra are as follows:—1954, 24.29; 1955, 22.45; 1956, 25.74; 1957, 25.42.

NOTE.—Minus sign (—) denotes excess of deaths over births.

During the first five years of the present century, the average annual increment to the population of Australia by natural increase was 56,886 persons. The increment rose to 81,695 persons a year in 1921-25, but thereafter fell to 52,650 in the five years 1931-35. During 1941-45, the average annual excess of births over civilian deaths was 74,750, while during 1951-55 the annual excess of births over deaths was a record high average of 119,940. The excess for the year 1958 was 138,781.

A graph showing the rate of natural increase for each year from 1860 to 1958 will be found on page 334.

(ii) *Comparison with other Countries.* Australia has a higher rate of natural increase than most European countries, owing to the fact that it has both a higher birth rate and a lower death rate. The following table gives a comparison between the rate of natural increase in Australia and that in some of the principal countries for which such information is available.

## NATURAL INCREASE OF POPULATION : VARIOUS COUNTRIES.

ANNUAL INCREASE PER 1,000 OF MEAN POPULATION.

Country.	1941-45.	1946-50.	1951-55.	1957.	Country.	1941-45.	1946-50.	1951-55.	1957.
Mexico ..	23.2	27.7	30.4	34.0	Finland ..	5.7	15.2	12.6	10.7
Ceylon ..	17.1	25.1	27.3	26.4	Norway ..	8.0	11.4	10.2	9.6
Egypt ..	12.7	21.4	a24.8	(b)	Ireland, Republic of	10.0	8.9	8.8	9.3
Israel ..	19.0	23.1	24.2	21.4	Japan ..	9.9	17.6	13.2	8.9
Canada ..	13.7	18.1	19.6	20.0	Italy ..	5.2	10.6	8.2	8.2
Union of S. Africa(c)	16.2	17.6	16.5	16.8	Switzerland ..	7.5	8.1	7.0	7.7
New Zealand(d)	11.7	16.1	15.0	15.7	Denmark ..	11.2	11.4	8.7	7.4
Argentina	13.8	15.6	15.8	(b)	France ..	-1.9	7.9	6.4	6.4
U.S.A. ..	9.6	14.2	15.1	15.4	Germany(f)	(b)	5.6	5.0	5.7
Australia(e)	10.3	13.7	13.6	14.1	United Kingdom ..	3.3	6.5	4.0	5.0
Netherlands ..	10.9	18.0	14.4	13.7	Sweden ..	8.1	8.0	5.5	4.7
Portugal ..	9.0	11.8	12.2	12.3	Belgium ..	-0.5	4.6	4.4	4.6
Spain ..	7.3	10.0	10.5	11.7	Austria ..	1.2	4.0	2.8	4.4

(a) 1951-53. (b) Not available. (c) Whites only. (d) Excludes Maoris.  
(e) Excludes full-blood aboriginals. (f) Federal Republic.

NOTE.—Minus sign (—) denotes decrease.

2. **Recorded Net Interstate and Oversea Migration.\***—The other factor of increase in the population, namely, the excess of arrivals over departures, known as "net migration," is, from its nature, much more subject to variation than is "natural increase".

Particulars of the increase by net migration are given below for five-year periods from 1926 to 1955 and for each of the years 1954 to 1958.

**POPULATION: INCREASE BY RECORDED NET INTERSTATE AND OVERSEA MIGRATION.(a)**

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
<b>MALES.</b>									
1926-30 ..	37,524	7,849	11,584	- 2,230	19,069	- 3,668	870	2,259	73,257
1931-35 ..	- 1,646	- 5,951	6,195	- 3,654	- 4,215	- 1,384	24	3	- 10,676
1936-40(b)	7,847	12,096	5,249	- 4,988	- 2,501	- 793	2,787	1,176	20,873
1941-45(b)(c)	6,614	17,502	- 6,487	2,202	- 9,261	- 4,312	889	- 1,822	5,325
1946-50(b)(c)	84,834	58,331	15,038	18,531	23,299	13,178	1,852	2,665	217,728
1951-55 ..	58,092	99,072	18,990	22,681	26,320	9,500	267	5,559	240,481
1954 ..	7,208	18,793	2,411	5,452	3,611	- 450	42 (d)	545	37,528
1955 ..	13,170	24,565	3,888	8,242	5,271	422	213 (d)	887	56,658
1956 ..	11,133	23,046	5,703	8,548	1,990	2,407	1 (d)	1,569	54,395
1957 ..	13,071	14,299	- 496	5,932	1,337	1,885	176 (d)	554	36,406
1958 ..	6,029	15,598	268	4,321	1,063	1,016	200	1,568	29,663
<b>FEMALES.</b>									
1926-30 ..	33,326	12,532	3,537	- 341	9,363	- 4,293	278	2,048	56,450
1931-35 ..	1,093	2,943	1,125	- 2,284	- 578	- 2,644	88	47	- 210
1936-40(b)	14,414	9,409	1,509	- 2,608	32	- 1,872	715	656	22,255
1941-45(b)(c)	3,648	10,745	- 4,759	786	- 3,654	- 3,701	357	- 938	2,484
1946-50(b)(c)	53,087	30,124	10,233	13,464	17,552	7,708	1,643	1,545	135,356
1951-55 ..	43,272	57,924	20,649	23,924	20,359	4,061	1,226	1,928	173,343
1954 ..	8,769	12,971	1,133	4,516	3,617	- 998	243 (d)	428	30,679
1955 ..	8,586	15,770	2,999	7,192	4,820	268	258 (d)	704	40,597
1956 ..	9,638	20,049	2,337	7,358	751	- 989	398 (d)	61	39,603
1957 ..	12,943	17,380	892	6,399	2,415	406	307 (d)	1,584	42,326
1958 ..	11,465	17,042	706	5,164	1,129	- 1,197	216	1,178	35,703
<b>PERSONS.</b>									
1926-30 ..	70,850	20,381	15,121	- 2,571	28,432	- 7,961	1,148	4,307	129,707
1931-35 ..	- 553	- 3,008	7,320	- 5,938	- 4,793	- 4,028	64	50	- 10,886
1936-40(b)	22,261	21,505	6,758	- 7,596	- 2,469	- 2,665	3,502	1,832	43,128
1941-45(b)(c)	10,262	28,247	- 11,246	2,988	- 12,915	- 8,013	1,246	- 2,760	7,809
1946-50(b)(c)	137,921	88,455	25,271	31,995	40,851	20,886	3,495	4,210	353,084
1951-55 ..	101,364	156,996	39,639	46,605	46,679	13,561	1,493	7,487	413,824
1954 ..	15,977	31,764	3,544	9,968	7,228	- 1,448	201 (d)	973	68,207
1955 ..	21,756	40,335	6,887	15,434	10,091	690	471 (d)	1,591	97,255
1956 ..	20,771	43,095	8,040	15,906	2,741	1,418	397 (d)	1,630	93,998
1957 ..	26,014	31,679	396	12,331	3,752	2,291	131 (d)	2,138	78,732
1958 ..	17,494	32,640	974	9,485	2,192	- 181	16	2,746	65,366

(a) Excess of arrivals over departures. Interstate migration relates to recorded movements by rail, sea and air and to certain special movements by road, together with an allowance for unrecorded movement into the Australian Capital Territory. (b) Excludes troop movements from September, 1939 to June, 1947. (c) Excludes interstate migration from July, 1943 to June, 1947. (d) Revised figures of net migration consequent on the June, 1957 Population Count of Canberra are as follows:—1954, males 501, females 634, persons 1,135; 1955, males 800, females 1,119, persons 1,919; 1956, males 1,481, females 477, persons 1,958; 1957, males 773, females 547, persons 1,320.

NOTE.—Minus sign (-) indicates excess of departures over arrivals.

\* The subject of oversea migration is dealt with at some length later in this chapter (see p. 311.)

In the five years ended 1935, there was a net emigration of 10,886 and, in the five years ended 1940, a net immigration of 43,128. During the war period 1941-45 net immigration fell to 7,809 persons. In 1946, there was a net loss by migration of 15,148 persons, due mainly to the departure of refugees and evacuees, and also fiancées, wives and children of British and Allied servicemen but, with increasing transport facilities and the resumption of assisted migration, there was a net gain of 10,611 in 1947, which increased rapidly to 55,115 in 1948, 150,001 in 1949 and 152,505 in 1950. This large net gain was due in great measure to the arrival of successive contingents from Australia's quota of 176,000 former European displaced persons, of whom 156,491 had arrived by the end of 1950. As this flow diminished, it was partly offset by new schemes for assisted migrants, but by 1953, the total net gain from all sources during the year had fallen to 42,897. Since then it has risen, being 78,732 in 1957 and 65,366 in 1958. The net gains in each of the years 1949 to 1952 were the highest recorded for individual years with the exception of 1919, for which year troops returning from the 1914-18 War were included.

3. **Total Increase.**—The total increase of the population is obtained by combining the natural increase with the increase by net migration. For the period September, 1939 to June, 1947, deaths of defence personnel have been deducted from the total increase so derived. The results of the 1947 and 1954 Censuses disclosed some unrecorded movements of population during the intercensal periods, July, 1933 to June, 1947 and July, 1947 to June, 1954, and particulars of total increase, after taking into account deaths of defence personnel in the earlier period, have been adjusted for these discrepancies. However, no separate adjustment has been applied to individual elements of increase during the periods, although intercensal discrepancies disclosed by previous censuses were adjusted on recorded overseas departures.

The annual increments to the population for the years 1954 to 1958 are shown below, together with the increases for each five years from 1926 to 1955. For the reasons stated in the previous paragraph, figures for the period 1933 to 1954 differ from the totals of figures for natural increase and net migration shown in preceding tables by an amount equal to the net total of deaths of defence personnel and unrecorded movements of population disclosed by the Censuses of 1947 and 1954.

## POPULATION : TOTAL INCREASE.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
<b>MALES.</b>									
1926-30 ..	109,954	51,605	37,229	12,353	30,314	3,333	739	2,434	247,961
1931-35 ..	50,277	18,318	26,789	5,049	5,871	4,619	- 109	502	111,316
1936-40(a)	57,601	36,297	28,364	4,218	9,995	5,526	2,847	2,622	147,470
1941-45(a)(b)	62,389	47,747	20,117	14,703	2,856	2,204	915	427	151,358
1946-50(a)(b)	162,932	119,713	63,500	52,117	43,168	21,249	2,162	4,738	469,579
1951-55 ..	143,348	173,561	72,591	58,708	50,729	18,891	931	4,725	523,484
1954 ..	24,746	34,531	12,664	12,248	8,514	1,496	120	(c) 412	94,731
1955 ..	32,581	41,467	13,908	13,555	10,601	3,193	371	(c) 1,244	116,920
1956 ..	31,176	40,299	15,326	14,013	7,595	5,157	200	(c) 2,026	115,792
1957 ..	35,216	32,183	9,920	11,856	6,949	4,736	76	(c) 1,048	101,984
1958 ..	28,559	34,336	10,982	10,240	6,325	3,931	60	2,137	96,570
<b>FEMALES.</b>									
1926-30 ..	114,059	56,949	34,665	15,066	23,769	2,600	404	2,251	249,763
1931-35 ..	61,442	30,672	27,772	7,246	12,142	3,507	275	539	143,595
1936-40(a)	75,275	37,026	31,791	8,076	14,458	5,053	997	1,778	174,454
1941-45(a)(b)	79,661	52,442	33,295	17,123	13,156	4,074	657	845	201,253
1946-50(a)(b)	145,127	102,362	57,054	39,844	39,393	18,804	1,712	3,409	407,705
1951-55 ..	141,518	144,278	72,675	53,084	47,372	16,577	1,656	5,166	482,326
1954 ..	28,558	30,311	11,668	10,330	9,158	1,550	385	(c) 1,018	92,978
1955 ..	31,029	32,677	14,024	12,837	10,734	3,097	496	(c) 1,082	105,976
1956 ..	31,245	37,303	12,937	13,264	6,490	1,852	646	(c) 514	104,251
1957 ..	36,937	35,829	12,560	12,435	8,430	3,320	586	(c) 2,056	112,153
1958 ..	36,630	35,948	12,409	11,549	7,044	1,748	547	1,702	107,577

For footnotes see next page.

NOTE.—Minus sign (-) denotes decrease.

POPULATION : TOTAL INCREASE—*continued.*

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
PERSONS.									
1926-30 ..	224,013	108,554	71,894	27,419	54,083	5,933	1,143	4,685	497,724
1931-35 ..	111,719	48,990	54,561	12,295	18,013	8,126	166	1,041	254,911
1936-40(a)	132,876	73,323	60,155	12,294	24,453	10,579	3,844	4,400	321,924
1941-45(a)(b)	142,050	100,189	53,412	31,826	16,012	6,278	1,572	1,272	352,611
1946-50(a)(b)	308,059	222,075	120,554	91,961	82,561	40,053	3,874	8,147	877,284
1951-55 ..	284,866	317,839	145,266	111,792	98,101	35,468	2,587	9,891	1,005,810
1954 ..	53,304	64,842	24,332	22,578	17,672	3,046	505	(c) 1,430	187,709
1955 ..	63,610	74,144	27,932	26,392	21,335	6,290	867	(c) 2,326	222,896
1956 ..	62,421	77,602	28,263	27,277	14,085	7,009	846	(c) 2,540	220,043
1957 ..	72,153	68,012	22,480	24,291	15,379	8,056	662	(c) 3,104	214,137
1958 ..	65,189	70,284	23,391	21,789	13,369	5,679	607	3,839	204,147

(a) Includes recorded deaths of defence personnel, whether inside or outside Australia, from September, 1939 to June, 1947. (b) Excludes interstate migration from July, 1943 to June, 1947. (c) Revised figures based on the June, 1957 Population Count of Canberra are as follows:—1954, males 368, females 1,224, persons 1,592; 1955, males 1,157, females 1,497, persons 2,654; 1956, males 1,938, females 930, persons 2,868; 1957, males 1,267, females 1,019, persons 2,286.

4. Rate of Population Growth.—(i) *Australia.* The annual percentage rate of population growth is computed by the compound interest formula. The formula is as follows :—

$$P_1 = P_0 (1+r)^t$$

where  $P_0$  and  $P_1$  are the populations at the beginning and end of the period respectively,  $t$  is the number of years intervening and  $r$  is the annual rate of growth.

The annual rates of growth per cent. of population in Australia during each of the years 1949 to 1958 were as follows:—1949, 3.25; 1950, 3.26; 1951, 2.65; 1952, 2.48; 1953, 1.87; 1954, 2.11; 1955, 2.45; 1956, 2.36; 1957, 2.25; and 1958, 2.09.

The annual rate of population growth during the present century has been 1.69 per cent., but the results from year to year have deviated widely from this figure. In the following table the period 31st December, 1900 to 31st December, 1958 has been arranged into certain defined groups of years according to the occurrence of influences markedly affecting the growth of population :—

## POPULATION : PERIODICAL RATES OF GROWTH.

Period.	Interval. (Years.)	Total Increase. ('000.)	Average Annual Numerical Increase. ('000.)	Annual Rate of Population Growth. (Per cent.)			
				Natural Increase.	Net Migration.	Total.	
1901 to 1913 ..	..	13	1,128	87	1.59	0.53	2.04
1914 to 1923 ..	..	10	862	86	1.50	0.15	1.64
1924 to 1929 ..	..	6	680	113	1.28	0.64	1.88
1930 to 1939(a)	..	10	569	57	0.82	0.03	0.85
1940 to 1946(a)	..	7	513	73	1.05	0.01	1.01
1947 to 1958(a)	..	12	2,434	203	1.46	1.07	2.36

(a) For the period September, 1939 to June, 1947, overseas movements of Australian defence forces have been excluded and deaths of members of these forces, whether occurring in Australia or overseas, have been included.

Up to 1913, the rate of natural increase was rising, and this factor, coupled with the impetus given to immigration from 1911 onwards by increased governmental assistance, was responsible for the comparatively high annual rate of 2.04 per cent. during this period. The 1914-18 War was a dominating influence in the decade 1914-23, and its effects can be

seen in the reduction of the rate from 2.04 to 1.64 per cent. From 1924 to 1929, more settled and prosperous conditions were experienced; encouraged migration was resumed on a large scale and, despite a further decline in the rate of natural increase owing to the persistent fall in the birth rate, the annual rate of growth rose to 1.88 per cent. After 1929 came the economic depression, and immigration ceased—in fact, Australia actually lost people through an excess of departures over arrivals in 1930, 1931, 1932 and 1935. The rate of natural increase also fell, and the annual rate of growth of the population fell to 0.85 per cent. With the outbreak of war in 1939, Australia entered a new phase in her demographic history, the full effects of which will not be seen for some time to come. The immediate effect of the war was to increase the number of marriages and to reverse the downward trend in fertility. The number of births increased each war year from 1940 to 1945, and these increases more than offset the rise in deaths due to war casualties and higher civilian death rates. As might be expected, migration over these years was negligible. The post-war period 1947 to 1958 was marked by a continued high natural increase and a resumption of immigration, the latter resulting in very high net gains in each of the four years 1949 to 1952. The annual rate of growth for the period was 2.36 per cent.

Rates of population growth from 1881 are shown for each State and Territory of Australia in the annual bulletin, *Demography*.

(ii) *Various Countries*. Estimated rates of growth of the population of Australia in comparison with those for other countries are shown in the following table:—

**POPULATION : RATES OF GROWTH IN VARIOUS COUNTRIES.**

Country.	Annual Rate of Population Growth. (Per cent.)					Country.	Annual Rate of Population Growth. (Per cent.)				
	1931-36.	1936-41.	1941-46.	1946-51.	1951-56.		1931-36.	1936-41.	1941-46.	1946-51.	1951-56.
Ceylon ..	1.34	1.40	2.15	2.95	2.89	Denmark ..	0.84	0.74	1.20	0.97	0.74
Canada ..	1.23	0.85	1.35	2.62	2.80	Sweden ..	0.34	0.45	1.01	1.03	0.68
Australia ..	0.76	0.96	0.98	2.55	2.28	Germany ..	0.58	(b)	(b)	0.92	0.56
New Zealand	0.79	a 0.58	1.81	2.04	2.27	Belgium ..	0.42	-0.10	0.22	0.73	0.56
U.S.A. ..	0.69	0.79	1.18	1.79	1.72	Italy ..	0.63	c 0.55	d 0.49	0.70	0.54
Japan ..	0.77	1.06	0.92	2.05	1.36	England and Wales ..	0.42	0.44	0.45	0.61	0.30
Netherlands	1.26	1.12	1.00	1.72	1.19	Scotland ..	0.50	0.64	0.03	-0.08	0.12
Switzerland..	0.44	0.43	0.98	1.24	1.19	Ireland, Re- public of	0.28	0.18	-0.20	-0.01	-0.42
Norway ..	0.46	0.52	0.90	1.25	0.99						
Spain ..	1.46	0.91	0.94	0.61	0.78						
France ..	0.02	-1.48	0.51	1.10	0.75						

(a) Excludes armed forces overseas at 31st December, 1941.

(b) Not available.

(c) Excludes war losses.

(d) Territory defined by 1947 peace treaty.

NOTE.—Minus sign (-) denotes decrease.

## § 6. Density.

1. *General*.—From certain aspects population may be less significant in respect of its absolute amount than in its relation to the area of the country. Australia, with an area of 2,974,581 square miles, and an estimated population at 31st December, 1958 of 9,951,618, excluding about 47,000 full-blood aboriginals, has a density of only 3.35 persons to the square mile, and is, therefore, the most sparsely populated of the civilized countries of the world. For the other continents and sub-continents, the densities in 1957 were approximately as follows:—Europe (excluding U.S.S.R.), 218; Asia (excluding U.S.S.R.), 148; U.S.S.R., 23; Africa, 19; North and Central America, 27; and South America, 19. The population of Australia has thus about one-sixth of the density of that of South America and of Africa; about one-seventh of that of U.S.S.R.; about one-eighth of that of North and Central America; about one-fourty-fourth of that of Asia (excluding U.S.S.R.); and about one-sixty-fifth of that of Europe (excluding U.S.S.R.).

On account of the large area of Australia and the unsuitability for settlement of much of the country, the density of population must necessarily increase slowly. In Australia as a whole, the figure has increased from 1.29 per square mile in 1901 to 3.35 in 1958. Victoria's density, however, has grown from 13.77 to 31.53 and that of New South Wales from 4.43 to 12.04 in the same period. When comparing the density of population of the several States, consideration should be given to the average annual rainfall distribution

in each State as an indication of the climatic influence upon probable population numbers. The proportion of the area of Australia receiving less than 10 inches of rainfall is 38 per cent.; that of the various States is:—New South Wales, 20 per cent.; Victoria, nil; Queensland, 13 per cent.; South Australia, 83 per cent.; Western Australia, 58 per cent.; and Tasmania, nil.

2. Main Countries of the World.—Number and density of population of the more important countries of the world in 1957 are shown in the following table. In some instances, more particularly in the cases of Asia and Africa, the numbers must be considered as rough approximations only.

**POPULATION OF THE PRINCIPAL COUNTRIES OF THE WORLD: NUMBER AND DENSITY, 1957.**

Country.	Population. ('000.)	Density. (a)	Country.	Population. ('000.)	Density. (a)
<b>EUROPE.</b>			<b>AFRICA.</b>		
Germany .. .. .	71,217	517.7	Nigeria .. .. .	32,433	86.9
United Kingdom .. .. .	51,657	548.3	Egypt .. .. .	24,020	62.2
Italy .. .. .	48,483	416.9	Ethiopia and Eritrea, Federa- tion of .. .. .	20,000	43.7
France .. .. .	44,000	206.8	French West Africa .. .. .	19,200	10.7
Spain .. .. .	29,431	151.4	Union of South Africa(d) .. .. .	14,167	30.0
Poland .. .. .	28,300	235.1	Belgian Congo .. .. .	13,100	14.5
Yugoslavia .. .. .	18,005	182.3	Sudan .. .. .	10,700	11.1
Romania .. .. .	17,829	194.4	Morocco .. .. .	10,115	63.8
Czechoslovakia .. .. .	13,353	270.5	Algeria .. .. .	10,143	11.0
Netherlands .. .. .	11,009	878.7	Tanganyika Territory .. .. .	8,788	24.2
Hungary .. .. .	9,812	273.2	Rhodesia and Nyasaland, Federation of .. .. .	7,450	15.3
Belgium .. .. .	8,989	763.1	Kenya .. .. .	6,261	27.8
Portugal .. .. .	8,909	250.3	Other .. .. .	47,623	..
Greece .. .. .	8,096	158.2	<i>Total Africa</i> .. .. .	<i>224,000</i>	<i>19.2</i>
Bulgaria .. .. .	7,667	178.1	<b>NORTH AND CENTRAL AMERICA.</b>		
Sweden .. .. .	7,367	424.3	United States of America .. .. .	171,229	56.7
Austria .. .. .	6,997	216.1	Mexico .. .. .	31,426	41.3
Switzerland .. .. .	5,117	321.0	Canada .. .. .	16,589	4.3
Denmark .. .. .	4,500	270.8	Cuba .. .. .	6,410	145.0
Finland .. .. .	4,333	33.3	Other .. .. .	24,346	..
Norway .. .. .	3,494	27.9	<i>Total North and Central America</i> .. .. .	<i>250,000</i>	<i>26.7</i>
Ireland, Republic of .. .. .	2,885	106.3	<b>SOUTH AMERICA.</b>		
Other .. .. .	2,550	..	Brazil .. .. .	61,268	18.6
<i>Total Europe</i> .. .. .	<i>414,000</i>	<i>217.5</i>	Argentina .. .. .	19,858	18.5
<b>ASIA.</b>			Colombia .. .. .	13,227	30.1
China .. .. .	627,800	166.6	Peru .. .. .	9,923	20.6
India .. .. .	392,440	309.1	Chile .. .. .	7,121	24.9
Japan .. .. .	90,900	636.7	Other .. .. .	19,603	..
Indonesia .. .. .	85,000	147.6	<i>Total South America</i> .. .. .	<i>131,000</i>	<i>19.1</i>
Pakistan .. .. .	84,450	231.5	<b>OCEANIA.</b>		
Vietnam .. .. .	27,200	213.5	Australia(e) .. .. .	9,643	3.2
Turkey(b) .. .. .	25,500	85.0	New Zealand and Depen- dencies(d) .. .. .	2,229	21.5
Philippines .. .. .	22,690	196.3	Territory of New Guinea .. .. .	1,312	14.1
South Korea .. .. .	22,250	594.5	Hawaii .. .. .	612	95.3
Thailand .. .. .	21,076	106.2	Papua .. .. .	468	5.2
Burma .. .. .	20,054	76.6	Fiji Islands .. .. .	354	50.2
Iran .. .. .	19,234	30.6	Other .. .. .	782	..
Afghanistan .. .. .	13,000	51.8	<i>Total Oceania</i> .. .. .	<i>15,400</i>	<i>4.7</i>
Taiwan .. .. .	9,506	684.6	<b>SUMMARY.</b>		
Ceylon .. .. .	9,165	361.8	Europe .. .. .	414,000	217.5
Nepal(c) .. .. .	8,787	161.7	Asia .. .. .	1,552,000	147.9
Malaya, Federation of .. .. .	6,280	123.9	U.S.S.R. .. .. .	200,200	23.1
Saudi Arabia .. .. .	6,036	9.8	Africa .. .. .	224,000	19.2
Other .. .. .	60,632	..	America, North and Central .. .. .	250,000	26.7
<i>Total Asia</i> .. .. .	<i>1,552,000</i>	<i>147.9</i>	America, South .. .. .	131,000	19.1
<i>U.S.S.R. (Europe and Asia)</i> .. .. .	<i>200,200</i>	<i>23.1</i>	Oceania .. .. .	15,400	4.7
			<i>Total</i> .. .. .	<i>2,786,600</i>	<i>53.3</i>

(a) Number of persons per square mile.  
1954.

(d) Includes non-Europeans.

(b) Includes European Territory.

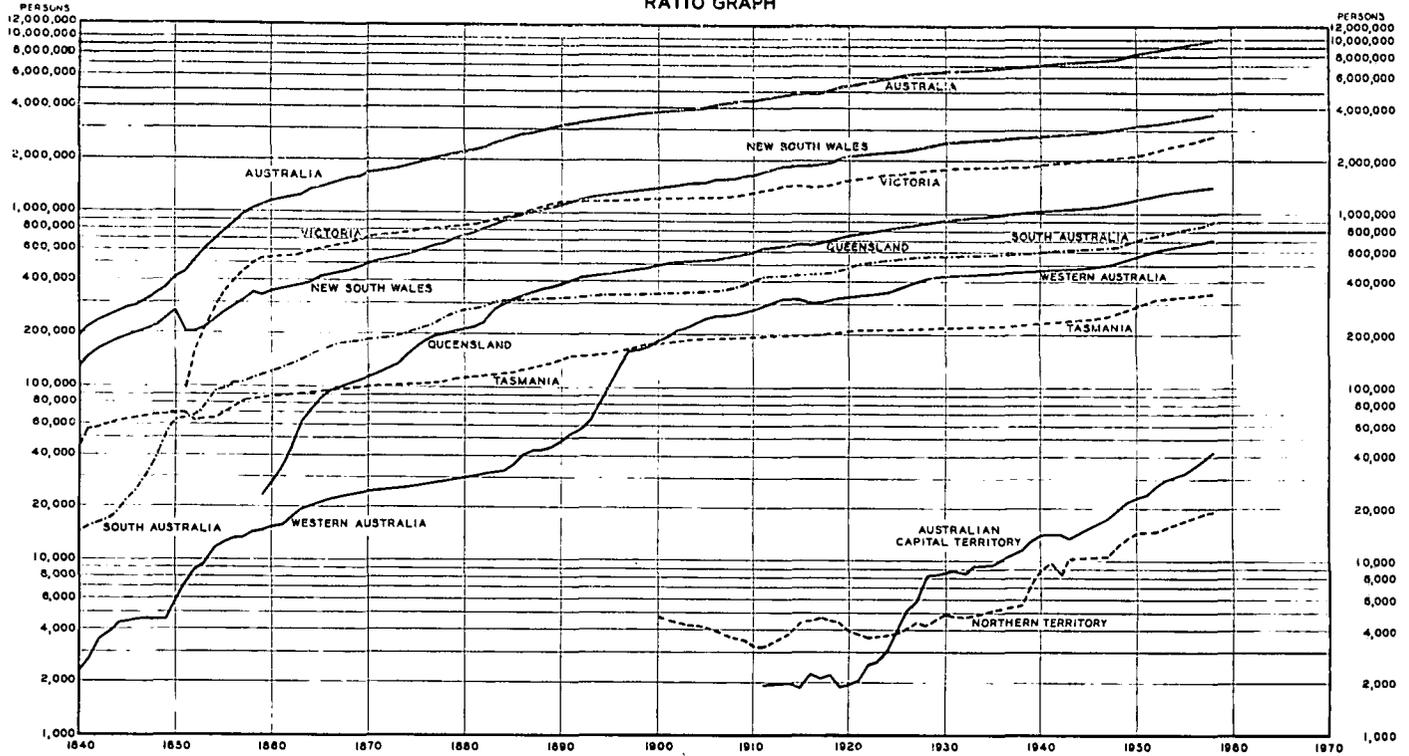
(e) Excludes full-blood aboriginals.

(c) Population

The populations shown in the table above are, in the main, in accordance with figures published in the *Population and Vital Statistics Report (Vol. X, No. 3, July 1958)*, published by the United Nations, and the countries have been arranged in accordance with the continental groups used therein. The totals for continents include adjustments for over-estimation and underenumeration.

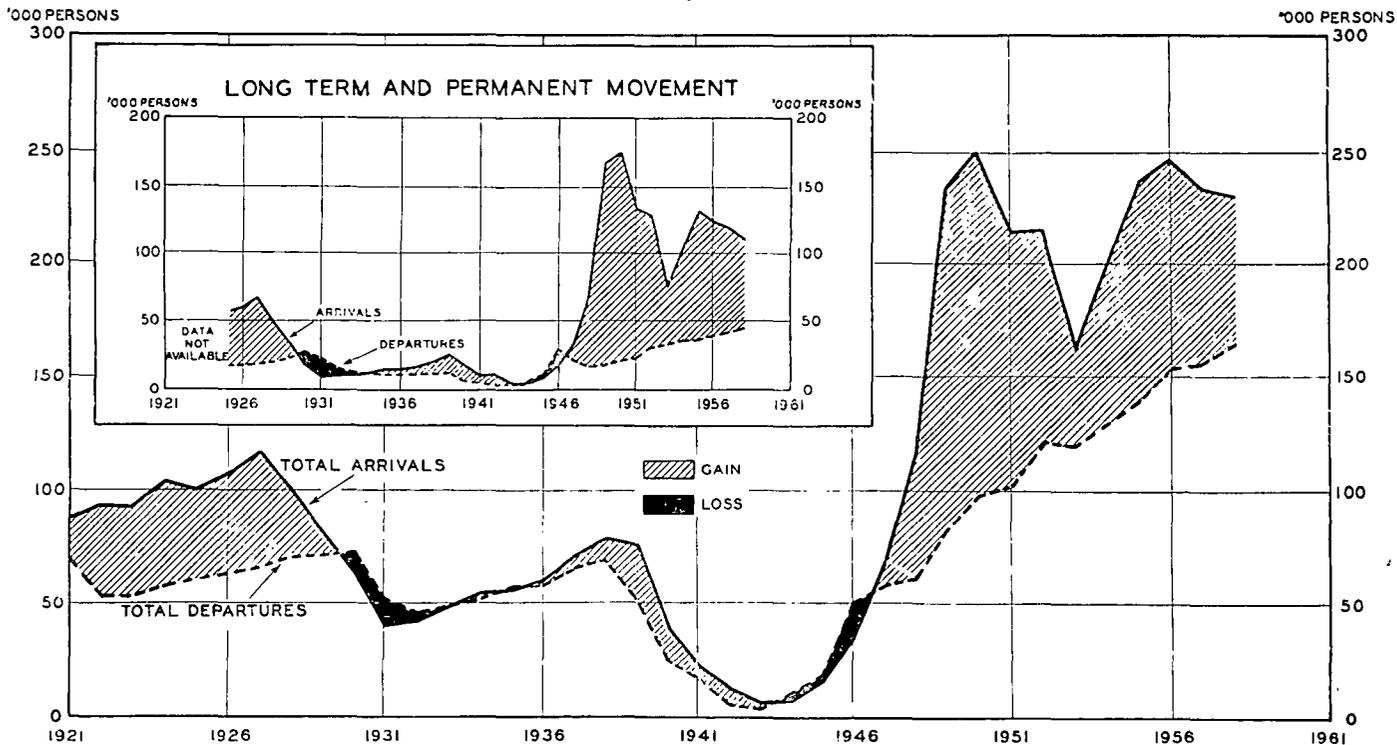
# POPULATION OF AUSTRALIA, 1840 TO 1958

## RATIO GRAPH



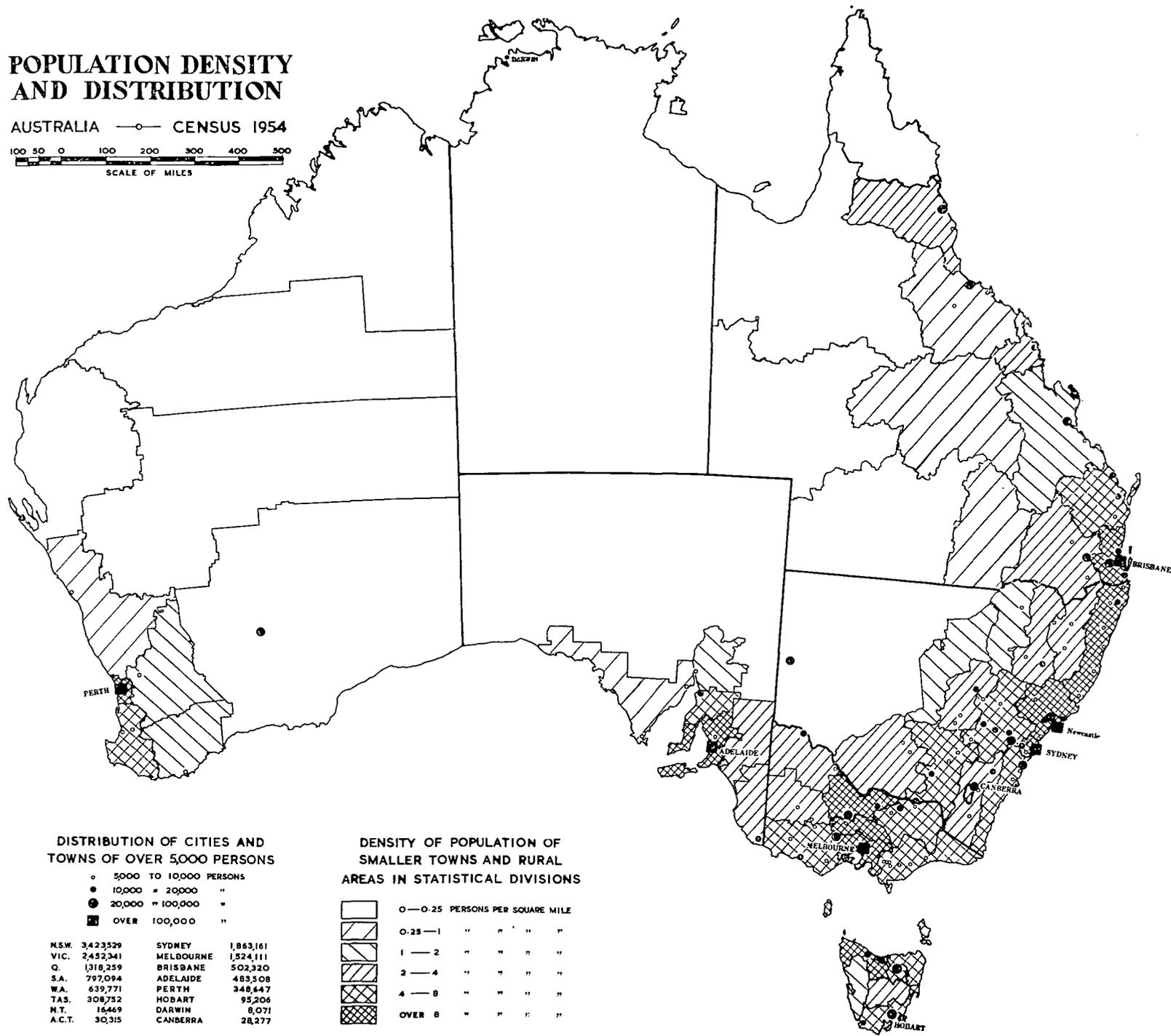
NOTE - THE VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO THE RATE OF INCREASE OR DECREASE; ACTUAL NUMBERS ARE INDICATED BY THE SCALE.

# OVERSEA ARRIVALS AND DEPARTURES AUSTRALIA, 1921 TO 1958



# POPULATION DENSITY AND DISTRIBUTION

AUSTRALIA — CENSUS 1954



## DISTRIBUTION OF CITIES AND TOWNS OF OVER 5,000 PERSONS

- 5,000 TO 10,000 PERSONS
- 10,000 " 20,000 "
- 20,000 " 100,000 "
- OVER 100,000 "

N.S.W.	3,423,529	SYDNEY	1,863,161
VIC.	2,452,341	MELBOURNE	1,524,111
Q.	1,318,259	BRISBANE	502,320
S.A.	797,094	ADELAIDE	483,508
WA.	639,771	PERTH	348,647
TAS.	308,752	HOBART	95,206
N.T.	16,469	DARWIN	8,071
A.C.T.	30,315	CANBERRA	28,277

## DENSITY OF POPULATION OF SMALLER TOWNS AND RURAL AREAS IN STATISTICAL DIVISIONS

□	0—0.25 PERSONS PER SQUARE MILE
▧	0.25—1 " " " "
▨	1—2 " " " "
▩	2—4 " " " "
▪	4—8 " " " "
▫	OVER 8 " " " "



## § 7. General Characteristics.

1. **Sex Distribution.**—(i) *States.* The number of males to each hundred females has been adopted as a measure of the "masculinity" of the population. On pages 163-5 in Official Year Book No. 2 a table is included showing the masculinity of the population of each of the States for each year from 1796 to 1907. In issue No. 5, on page 123, the figures in this table for the years 1901 to 1907 were modified in accordance with the results of the 1911 Census.

With the exception of some dislocation arising from the two World Wars, there was a continuous diminution of the masculinity of the population until 1945. This resulted from the increasing proportion of the population in the higher age groups, in which females preponderate owing to their greater longevity, and from the general long-term fall in the birth rate. At the 1947 Census, the numbers of the sexes were practically equal, but there has since been an increase in masculinity owing to the higher birth rate and to the increase in the number of immigrants, the majority of whom are males.

The following table shows the masculinity of the population at five-year intervals from 1925 to 1950 and for each of the years 1954 to 1958 :—

POPULATION : MASCULINITY, 1925 TO 1958.  
(NUMBER OF MALES PER 100 FEMALES.)

At 31st December—	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
1925 .. ..	104.09	99.71	110.94	102.02	115.76	100.90	297.61	132.37	104.24
1930 .. ..	103.39	99.14	110.66	100.97	117.17	101.53	263.66	118.69	103.85
1935 .. ..	102.38	97.84	109.81	100.20	113.21	102.45	212.80	115.64	102.71
1940 .. ..	100.98	97.85	108.48	98.91	110.38	102.74	240.31	124.62	101.81
1945 .. ..	99.75	97.50	105.45	98.21	105.49	101.15	220.16	115.86	100.36
1950 .. ..	100.88	99.27	106.02	101.83	106.07	102.70	188.05	123.33	101.83
1954 .. ..	100.84	101.00	105.48	102.88	106.47	103.89	161.76	a112.70	102.35
1955 .. ..	100.91	101.67	105.34	102.96	106.22	103.87	155.28	a112.86	102.53
1956 .. ..	100.89	101.85	105.60	103.05	106.43	105.87	144.29	a121.76	102.72
1957 .. ..	100.78	101.53	105.11	102.83	105.83	106.61	134.55	113.81	102.45
1958 .. ..	100.33	101.37	104.81	102.46	105.51	107.85	126.54	114.81	102.17

(a) Revised figures based on the June, 1957 Population Count of Canberra are as follows:—1954, 110.84; 1955, 107.77 and 1956, 113.19.

(ii) *Various Countries.* The masculinity of the population in various countries is shown in the following table:—

POPULATION : MASCULINITY IN VARIOUS COUNTRIES.

Country.	Year.	Number of Males per 100 Females.	Country.	Year.	Number of Males per 100 Females.
Canada .. ..	1957	103.0	Northern Ireland ..	1957	95.0
Australia(a) .. ..	1958	102.2	Italy .. ..	1951	95.0
Ireland, Republic of .. ..	1956	102.1	Yugoslavia .. ..	1954	94.6
New Zealand(b) .. ..	1957	101.1	Spain .. ..	1955	93.7
Union of South Africa(c)	1955	100.0	Switzerland .. ..	1954	93.4
Sweden .. ..	1955	99.4	England and Wales ..	1957	93.1
Netherlands .. ..	1955	99.3	France .. ..	1955	93.1
Norway .. ..	1954	98.8	Poland .. ..	1955	92.4
Denmark .. ..	1954	98.5	Scotland .. ..	1957	91.8
United States of America	1956	98.4	Germany, Federal Re-		
Belgium .. ..	1954	96.7	public .. ..	1955	88.9
Japan .. ..	1955	96.6	Austria .. ..	1955	87.0

(a) Excludes full-blood aboriginals.

(b) Excludes Maoris.

(c) White population only.

2. Age Distribution.—The age distribution of the population is obtained only at a census, but estimates, based on the census distribution and on births, recorded ages at death and recorded ages of migrants, are made for intercensal years.

Estimates for 30th June, 1957 and 1958 are shown in the following table. Particulars of the age distribution recorded at the 1947 and 1954 Censuses were published in Official Year Book No. 43, page 560.

**POPULATION: ESTIMATED AGE DISTRIBUTION(a), AUSTRALIA.**

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Age last Birthday. (Years.)	30th June, 1957.			30th June, 1958.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
0- 4 .. .. .	521,350	497,607	1,018,957	533,488	508,502	1,041,990
5- 9 .. .. .	500,164	478,060	978,224	507,139	485,132	992,271
10-14 .. .. .	436,034	416,203	852,237	464,944	443,605	908,549
15-19 .. .. .	341,544	324,457	666,001	352,055	336,006	688,061
20-24 .. .. .	319,172	292,893	612,065	323,071	301,832	624,903
25-29 .. .. .	364,113	326,111	690,224	353,805	320,331	674,136
30-34 .. .. .	387,908	356,419	744,327	393,414	359,883	753,297
35-39 .. .. .	352,290	338,250	690,540	363,244	347,263	710,507
40-44 .. .. .	336,731	324,682	661,413	338,731	330,627	669,358
45-49 .. .. .	311,145	289,717	600,862	314,654	294,383	609,037
50-54 .. .. .	260,388	239,784	500,172	272,718	252,588	525,306
55-59 .. .. .	219,615	220,864	440,479	221,476	218,961	440,437
60-64 .. .. .	174,050	198,484	372,534	177,393	202,550	379,943
65-69 .. .. .	153,994	178,661	332,655	152,111	178,065	330,176
70-74 .. .. .	102,182	125,862	228,044	107,180	133,934	241,114
75-79 .. .. .	61,515	84,473	145,988	60,768	84,208	144,976
80-84 .. .. .	28,024	42,265	70,289	29,654	45,347	75,001
85-89 .. .. .	11,203	18,241	29,444	10,389	17,560	27,949
90-94 .. .. .	2,700	4,802	7,502	2,905	5,222	8,127
95 and over .. .. .	380	742	1,122	291	711	1,002
<b>Total .. .. .</b>	<b>4,884,502</b>	<b>4,758,577</b>	<b>9,643,079</b>	<b>4,979,430</b>	<b>4,866,710</b>	<b>9,846,140</b>

(a) Based on the age distribution at the Census of 30th June, 1954 (adjusted only for "not stated" ages) and on subsequent births, recorded ages at death and recorded ages of migrants.

The next table shows the change which has taken place in the age constitution of the population of Australia since 1871. Up to the 1954 Census, each successive census except that of 1921 had revealed a larger percentage of the population 15 years of age and over than had been recorded at the previous census. However, in 1954, the proportion of this age group dropped sharply to a level (71.5 per cent.) slightly below that of 1933, the proportion of children under 15 years showing a corresponding increase to 28.5 per cent. of the total population. The proportions at 30th June, 1958 were estimated to be 70.1 per cent. and 29.9 per cent. respectively.

## POPULATION : PROPORTIONAL AGE DISTRIBUTION, AUSTRALIA, 1871 TO 1958.

(Per cent.)

Census.	Males.				Females.				Persons.			
	Under 15 years.	15 and under 65.	65 and over.	Total.	Under 15 years.	15 and under 65.	65 and over.	Total.	Under 15 years.	15 and under 65.	65 and over.	Total.
1871..	38.84	59.11	2.05	100	46.02	52.60	1.38	100	42.09	56.17	1.74	100
1881..	36.36	60.81	2.83	100	41.86	56.03	2.11	100	38.89	58.61	2.50	100
1891..	34.80	62.01	3.19	100	39.38	58.09	2.53	100	36.92	60.19	2.89	100
1901..	33.89	61.80	4.31	100	36.51	59.88	3.61	100	35.14	60.88	3.98	100
1911..	30.84	64.82	4.34	100	32.52	63.28	4.20	100	31.65	64.08	4.27	100
1921..	31.64	63.88	4.48	100	31.79	63.83	4.38	100	31.71	63.86	4.43	100
1933..	27.53	66.09	6.38	100	27.42	65.99	6.59	100	27.48	66.04	6.48	100
1947..	25.49	67.08	7.43	100	24.62	66.71	8.67	100	25.06	66.89	8.05	100
1954..	28.81	63.82	7.37	100	28.23	62.52	9.25	100	28.52	63.18	8.30	100
1958(a)	30.23	62.47	7.30	100	29.53	60.91	9.56	100	29.89	61.70	8.41	100

(a) Estimate, 30th June.

3. Conjugal Condition.—Of the total population of Australia at the 1954 Census, 46.9 per cent. had never married; 47.1 per cent. were married (including 1.4 per cent. married but permanently separated); 5.2 per cent. were widowed; and 0.8 per cent. were divorced. Between 1947 and 1954, the number never married increased by 17.7 per cent.; those married (including permanently separated) by 20.6 per cent.; the widowed by 10.2 per cent.; and the divorced by 31.8 per cent.

From the demographic point of view, the most important change in the conjugal condition of the population of Australia between 1947 and 1954 was the increase of 35.0 per cent. in never married persons under 15 years of age, which offset by many times the continued decrease in never married persons aged 15 years and over. This decrease was, however, confined to females, as the number of unmarried males aged 15 years and over increased by 3.6 per cent. between 1947 and 1954. The proportion of married persons continued to increase, and in 1954 comprised 66 per cent. of the population 15 years of age and over who stated their conjugal condition, compared with 62 per cent. in 1947 and 54 per cent. in 1933.

The number of widowed females recorded in Australia in 1954 was 351,102, or more than three times as many as the number of widowed males. This disparity is the result of two influences. The first is the greater longevity of females coupled with the usually younger age at marriage; and the second is that a larger proportion of widowed males remarry.

## POPULATION : CONJUGAL CONDITION, AUSTRALIA, 1947 AND 1954.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Conjugal Condition.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Never Married—							
Under 15 years of age ..	967,759	931,294	1,899,053	1,309,660	1,253,674	2,563,334	664,281
15 years of age and over	929,212	748,414	1,677,626	962,491	684,154	1,646,645	-30,981
Total .. ..	1,896,971	1,679,708	3,576,679	2,272,151	1,937,828	4,209,979	633,300
Married .. ..	1,692,913	1,686,885	3,379,798	2,062,122	2,043,651	4,105,773	725,975
Married but Permanently Separated .. ..	58,722	67,890	126,612	57,371	66,228	123,599	-3,013
Widowed .. ..	111,680	309,383	421,063	113,064	351,102	464,166	43,103
Divorced .. ..	24,952	27,441	52,393	32,389	36,650	69,039	16,646
Not Stated .. ..	12,132	10,681	22,813	9,021	4,953	13,974	-8,839
Total .. ..	3,797,370	3,781,988	7,579,358	4,546,118	4,440,412	8,986,530	1,407,172

NOTE.—Minus sign (-) denotes decrease.

4. Birthplace.—At 30th June, 1954, the Australian-born element of the population of Australia represented 85.7 per cent. as compared with 90.2 per cent. at the 1947 Census. The number of Australian-born increased by 864,893, or 12.7 per cent., between 1947 and 1954, while the oversea-born population increased by 542,279 or 72.9 per cent. The latter resulted mainly from the increase of 503,458 in the number of persons of European birthplace between 1947 and 1954—principally persons born in England (an increase of 96,819); Italy (86,265); Germany (50,855); Poland (50,021); and the Netherlands (49,861).

Although numerically less significant, the number of persons of Asian and African birthplace more than doubled during the intercensal period, but there was little change in the number of persons born elsewhere.

Of persons born outside Australia, 57 per cent. were males and 43 per cent. females.

POPULATION : BIRTHPLACES, AUSTRALIA, 1947 AND 1954.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Birthplace.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
<i>Australia</i> .. ..	3,380,324	3,454,847	6,835,171	3,812,435	3,887,629	7,700,064	864,893
<i>New Zealand</i> .. ..	21,890	21,720	43,610	21,723	21,627	43,350	- 260
<i>Other Australasian</i> .. ..	776	810	1,586	1,065	1,058	2,123	537
<b>Total, Australasia</b> .. ..	<b>3,402,990</b>	<b>3,477,377</b>	<b>6,880,367</b>	<b>3,835,223</b>	<b>3,910,314</b>	<b>7,745,537</b>	<b>865,170</b>
<i>England</i> .. ..	205,330	176,262	381,592	256,699	221,712	478,411	96,819
<i>Wales</i> .. ..	6,859	5,005	11,864	8,343	6,144	14,487	2,623
<i>Scotland</i> .. ..	55,734	47,264	102,998	66,792	56,842	123,634	20,636
<i>Northern Ireland</i> .. ..	3,214	2,325	5,539	5,527	3,976	9,503	3,964
<i>Ireland, Republic of</i> .. ..	2,420	2,244	4,664	3,595	2,397	5,992	1,328
<i>Ireland (undefined)</i> .. ..	18,309	16,301	34,610	18,054	14,124	32,178	-2,432
<i>Austria</i> .. ..	2,368	1,851	4,219	5,582	5,286	10,868	6,649
<i>Czechoslovakia</i> .. ..	926	558	1,484	8,515	4,165	12,680	11,196
<i>Estonia</i> .. ..	656	446	1,102	3,393	3,156	6,549	5,447
<i>France</i> .. ..	1,077	1,138	2,215	2,417	2,282	4,699	2,484
<i>Germany</i> .. ..	8,955	5,612	14,567	33,663	31,759	65,422	50,855
<i>Greece</i> .. ..	9,115	3,176	12,291	16,794	9,068	25,862	13,571
<i>Hungary</i> .. ..	702	525	1,227	9,054	5,548	14,602	13,375
<i>Italy</i> .. ..	22,506	11,126	33,632	80,279	39,618	119,897	86,265
<i>Latvia</i> .. ..	296	151	447	9,524	7,734	17,258	16,811
<i>Lithuania</i> .. ..	169	104	273	5,272	3,152	8,424	8,151
<i>Malta</i> .. ..	2,472	766	3,238	12,411	7,577	19,988	16,750
<i>Netherlands</i> .. ..	1,577	597	2,174	30,046	21,989	52,035	49,861
<i>Poland</i> .. ..	3,672	2,901	6,573	35,652	20,942	56,594	50,021
<i>Ukraine</i> .. ..	2,817	2,159	4,976	8,728	6,029	14,757	22,872
<i>U.S.S.R.</i> .. ..				6,419	6,672	13,091	
<i>Yugoslavia</i> .. ..	4,281	1,585	5,866	15,473	7,383	22,856	16,990
<i>Other European</i> .. ..	11,990	4,065	16,055	17,471	7,806	25,277	9,222
<b>Total, Europe</b> .. ..	<b>365,445</b>	<b>286,161</b>	<b>651,606</b>	<b>659,703</b>	<b>495,361</b>	<b>1,155,064</b>	<b>503,458</b>
<i>Ceylon, India and Pakistan</i> .. ..	5,247	2,913	8,160	8,487	6,373	14,860	6,700
<i>China</i> .. ..	5,135	1,269	6,404	7,199	3,078	10,277	3,873
<i>Cyprus</i> .. ..	544	137	681	4,254	1,519	5,773	5,092
<i>Syria and Lebanon</i> .. ..	1,035	851	1,886	2,614	1,552	4,166	2,280
<i>Other Asian</i> .. ..	4,129	2,836	6,965	9,717	6,788	16,505	9,540
<b>Total, Asia</b> .. ..	<b>16,090</b>	<b>8,006</b>	<b>24,096</b>	<b>32,271</b>	<b>19,310</b>	<b>51,581</b>	<b>27,485</b>
<i>Egypt</i> .. ..	412	391	803	4,392	3,758	8,150	7,347
<i>Union of South Africa</i> .. ..	3,071	2,795	5,866	3,113	2,858	5,971	105
<i>Other African</i> .. ..	494	374	868	930	775	1,705	837
<b>Total, Africa</b> .. ..	<b>3,977</b>	<b>3,560</b>	<b>7,537</b>	<b>8,435</b>	<b>7,391</b>	<b>15,826</b>	<b>8,289</b>
<i>Canada</i> .. ..	2,300	1,709	4,009	2,571	1,917	4,488	479
<i>United States of America</i> .. ..	3,794	2,438	6,232	5,039	3,250	8,289	2,057
<i>Other American</i> .. ..	783	606	1,389	938	781	1,719	330
<b>Total, America</b> .. ..	<b>6,877</b>	<b>4,753</b>	<b>11,630</b>	<b>8,548</b>	<b>5,948</b>	<b>14,496</b>	<b>2,866</b>
<i>Polynesia</i> .. ..	1,526	1,619	3,145	1,628	1,730	3,358	213
<i>At Sea</i> .. ..	465	512	977	310	358	668	- 309
<b>Total Born Outside Australia</b> .. ..	<b>417,046</b>	<b>327,141</b>	<b>744,187</b>	<b>733,683</b>	<b>552,783</b>	<b>1,286,466</b>	<b>542,279</b>
<b>Total</b> .. ..	<b>3,797,370</b>	<b>3,781,988</b>	<b>7,579,358</b>	<b>4,546,118</b>	<b>4,440,412</b>	<b>8,986,530</b>	<b>1,407,172</b>

NOTE.—Minus sign (—) denotes decrease.

5. *Period of Residence in Australia.*—This table classifies the immigrant population of Australia according to period of residence in Australia, and reflects the greatly increased rate of immigration since 1947. It shows that in 1954, of persons born outside Australia who stated their period of residence, 40.9 per cent. had resided in Australia for a period of less than 5 years, 53.9 per cent. for less than 8 years, and 56.2 per cent. for less than 15 years, compared with 5.7, 7.7 and 14.8 per cent. respectively at the previous Census in 1947.

**IMMIGRANT POPULATION : PERIOD OF RESIDENCE, AUSTRALIA, 1947  
AND 1954.**

PERSONS BORN OUTSIDE AUSTRALIA.

Period of Residence.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Under 1 year . . . . .	16,660	9,953	26,613	47,430	34,841	82,271	55,658
1 year and under 2 years . .	4,116	4,953	9,069	32,228	27,096	59,324	50,255
2 years and under 3 years	2,124	1,322	3,446	65,374	39,354	104,728	101,282
3 years and under 4 years	822	462	1,284	71,183	50,367	121,550	120,266
4 years and under 5 years	671	319	990	87,636	62,200	149,836	148,846
<b>Total under 5 years</b>	<b>24,393</b>	<b>17,009</b>	<b>41,402</b>	<b>303,851</b>	<b>213,858</b>	<b>517,709</b>	<b>476,307</b>
5 years and under 6 years	2,217	1,238	3,455	64,618	45,416	110,034	106,579
6 years and under 7 years	2,374	1,827	4,201	21,522	15,424	36,946	32,745
7 years and under 8 years	3,608	3,032	6,640	9,452	7,883	17,335	10,695
8 years and under 9 years	7,966	6,803	14,769	15,677	12,526	28,203	— 23,278
9 years and under 10 years	6,270	4,166	10,436				
10 years and under 15 years	13,507	12,769	26,276				
<b>Total 5 years and under 15 years . .</b>	<b>35,942</b>	<b>29,835</b>	<b>65,777</b>	<b>111,269</b>	<b>81,249</b>	<b>192,518</b>	<b>126,741</b>
15 years and over . . . . .	345,039	270,399	615,438	306,288	247,819	554,107	— 61,331
Not Stated . . . . .	11,672	9,898	21,570	12,275	9,857	22,132	562
<b>Born outside Australia . .</b>	<b>417,046</b>	<b>327,141</b>	<b>744,187</b>	<b>733,683</b>	<b>552,783</b>	<b>1,286,466</b>	<b>542,279</b>
<b>Born in Australia (a) . .</b>	<b>3,380,324</b>	<b>3,454,847</b>	<b>6,835,171</b>	<b>3,812,435</b>	<b>3,887,629</b>	<b>7,700,064</b>	<b>864,893</b>
<b>Total . . . . .</b>	<b>3,797,370</b>	<b>3,781,988</b>	<b>7,579,358</b>	<b>4,546,118</b>	<b>4,440,412</b>	<b>8,986,530</b>	<b>1,407,172</b>

(a) Excludes full-blood aboriginals.

NOTE.—Minus sign (—) denotes decrease.

6. *Nationality.*—At 30th June, 1954, 8,582,251 persons, or 95.5 per cent. of the Australian population, were of British nationality (consisting of 85.7 per cent. born in Australia and 9.8 per cent. born outside), compared with 99.5 per cent. in 1947 (90.2 per cent. Australian-born and 9.3 per cent. born outside Australia). Of the oversea-born population in 1954, 68.6 per cent. were British subjects, compared with 94.8 per cent. in 1947. The most numerous foreign nationals in Australia at 30th June, 1954, were:—Italian, 90,018 persons; Dutch, 53,458; Polish, 49,746; German, 31,448; Yugoslav, 18,124; Greek, 17,843; Ukrainian, 17,239; and Latvian, 17,225.

POPULATION: NATIONALITY (i.e., ALLEGIANCE), AUSTRALIA, 1947 AND 1954.  
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Nationality.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
British(a)—							
Born in Australia ..	3,380,324	3,454,847	6,835,171	3,812,435	3,887,629	7,700,064	864,893
Born outside Australia	387,767	317,767	705,534	484,798	397,389	882,187	176,653
<i>Total, British</i> ..	<i>3,768,091</i>	<i>3,772,614</i>	<i>7,540,705</i>	<i>4,297,233</i>	<i>4,285,018</i>	<i>8,582,251</i>	<i>1,041,546</i>
Foreign—							
American (U.S.) ..	2,474	877	3,351	3,761	1,958	5,719	2,368
Austrian ..	376	280	656	1,859	1,696	3,555	2,899
Chinese ..	4,329	529	4,858	5,010	931	5,941	1,083
Czechoslovak ..	239	135	374	4,958	2,280	7,238	6,864
Dutch ..	1,408	593	2,001	30,518	22,940	53,458	51,457
Estonian ..	159	96	255	2,720	2,581	5,301	5,046
French ..	770	551	1,321	1,908	1,624	3,532	2,211
German ..	1,669	692	2,361	17,262	14,186	31,448	29,087
Greek ..	3,720	784	4,504	11,415	6,428	17,843	13,339
Hungarian ..	154	173	327	5,910	3,746	9,656	9,329
Italian ..	5,473	1,699	7,172	61,673	28,345	90,018	82,846
Latvian ..	36	25	61	9,161	8,064	17,225	17,164
Lithuanian ..	23	15	38	4,854	3,248	8,102	8,064
Norwegian ..	685	60	745	1,414	284	1,698	953
Polish ..	839	721	1,560	29,524	20,222	49,746	48,186
Romanian ..	39	31	70	871	519	1,390	1,320
Russian ..	333	210	543	2,174	2,077	4,251	3,708
Swiss ..	321	127	448	927	696	1,623	1,175
Ukrainian ..				9,871	7,368	17,239	17,239
Yugoslav ..	1,753	343	2,096	11,633	6,491	18,124	16,028
Other Foreign	3,292	672	3,964	8,580	3,343	12,223	8,259
Stateless ..	1,187	761	1,948	22,582	16,367	38,949	37,001
<i>Total, Foreign</i> ..	<i>29,279</i>	<i>9,374</i>	<i>38,653</i>	<i>248,885</i>	<i>155,394</i>	<i>404,279</i>	<i>365,626</i>
<i>Total</i> ..	<i>3,797,370</i>	<i>3,781,988</i>	<i>7,579,358</i>	<i>4,546,118</i>	<i>4,440,412</i>	<i>8,986,530</i>	<i>1,407,172</i>

(a) "Irish" nationality is included with "British" nationality for the purpose of this table.

7. Religion.—At the 1921 Census, 92,258 persons in Australia, or 1.7 per cent., gave no reply to this question, but at the Censuses of 1933, 1947 and 1954, when the public was informed that there was no legal obligation to answer this question, 848,948 persons (12.8 per cent.), 824,824 (10.9 per cent.) and 855,819 (9.5 per cent.), respectively, gave no reply. Of males 10.3 per cent., and of females 8.7 per cent., did not state their religion in 1954.

Of those who stated their religion, the greatest numerical increase during the intercensal period between 1947 and 1954 was recorded by Roman Catholic and Catholic combined. This group was followed closely by Church of England, and then Presbyterian, Methodist and Lutheran in that order. Amongst the denominations with the largest numbers of adherents, the greatest proportional increases were recorded by Roman Catholic and Catholic combined, 29.9 per cent.; Presbyterian, 17.0 per cent.; Church of England, 15.3 per cent.; and Methodist, 12.2 per cent. The largest proportional increase was that of the Lutheran denomination, 73.7 per cent.

At the 1954 Census, as at earlier censuses, 99 per cent. of those who stated their religion professed the Christian faith. Between 1947 and 1954, the number who stated they were of non-Christian religion increased by 50 per cent., while those specifically stating they had no religion decreased by 10 per cent.

**POPULATION: RELIGION, AUSTRALIA, 1947 AND 1954.**  
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Religion.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Christian—							
Baptist .. ..	53,197	60,330	113,527	60,048	67,396	127,444	13,917
Brethren .. ..	5,807	7,195	13,002	7,511	8,893	16,404	3,402
Catholic, Roman(a) .. ..	335,241	294,957	630,198	413,719	347,383	761,102	130,904
Catholic(a) .. ..	448,959	507,581	956,540	635,398	664,486	1,299,884	343,344
Church of Christ .. ..	33,276	38,495	71,771	37,880	42,484	80,364	8,593
Church of England .. ..	1,480,527	1,476,505	2,957,032	1,709,197	1,699,653	3,408,850	451,818
Congregational .. ..	29,364	33,879	63,243	32,508	36,944	69,452	6,209
Greek Orthodox .. ..	(b)	(b)	(b)	44,382	30,363	74,745	(b)
Lutheran .. ..	34,854	32,037	66,891	60,306	55,872	116,178	49,287
Methodist .. ..	425,745	445,680	871,425	478,605	499,328	977,933	106,508
Presbyterian .. ..	366,892	376,648	743,540	430,798	439,444	870,242	126,702
Protestant (undefined) .. ..	36,708	36,562	73,270	48,539	46,877	95,416	22,146
Salvation Army .. ..	17,542	20,030	37,572	20,304	22,534	42,838	5,266
Seventh Day Adventist .. ..	7,453	10,097	17,550	11,166	14,163	25,329	7,779
Other (including Christian undefined) .. ..	27,492	29,883	57,375	31,957	35,616	67,573	10,198
<b>Total, Christian .. ..</b>	<b>3,303,057</b>	<b>3,369,879</b>	<b>6,672,936</b>	<b>4,022,318</b>	<b>4,011,436</b>	<b>8,033,754</b>	<b>1,360,818</b>
Non-Christian—							
Hebrew .. ..	16,426	15,593	32,019	24,548	23,888	48,436	16,417
Other .. ..	3,736	807	4,543	4,910	1,471	6,381	1,838
<b>Total, Non-Christian .. ..</b>	<b>20,162</b>	<b>16,400</b>	<b>36,562</b>	<b>29,458</b>	<b>25,359</b>	<b>54,817</b>	<b>18,255</b>
Indefinite .. ..	9,838	8,870	18,708	10,038	8,418	18,456	-252
No Religion .. ..	18,888	7,440	26,328	16,652	7,032	23,684	-2,644
No Reply .. ..	445,425	379,399	824,824	467,652	388,167	855,819	30,995
<b>Total .. ..</b>	<b>3,797,370</b>	<b>3,781,988</b>	<b>7,579,358</b>	<b>4,546,118</b>	<b>4,440,412</b>	<b>8,986,530</b>	<b>1,407,172</b>

(a) So described in individual Census Schedules.

(b) Not available.

NOTE.—Minus sign (—) denotes decrease.

8. **Industry.**—In the following table, the male and female populations of Australia are classified according to the industry in which they were usually engaged at the 1954 Census. Persons usually engaged in industry are regarded as being "in the work force," while the remainder of the population, which at the 1954 Census comprised 5,284,508 persons, is classified as not being in the work force. The term "in the work force" includes persons of all ages who are employers, self-employed or working on their own account, wage and salary earners and unpaid helpers engaged in industry. It also includes persons "not at work," i.e., those who stated that they were usually engaged in work, but were not actively seeking a job at the time of the Census by reason of sickness, accident, etc., or because they were on strike, changing jobs or temporarily laid off, etc.; also persons able and willing to work but unable to secure employment, as well as casual and seasonal workers not actually in a job at the time of the Census.

Persons who do not earn their living by doing work for monetary reward, such as children, housewives, full-time students, retired persons, pensioners and permanent inmates of institutions, are regarded as not being in the work force.

About 63 in every 100 of the male population and 19 in every 100 of the female population were in the work force, or in other words there were, in 1954, 3.4 males to every female in the work force.

Of the total males in the work force, those engaged in Manufacturing represented the largest proportion, namely 28.0 per cent., followed in order by those in Primary Production, 16.1 per cent.; Commerce, 13.6 per cent.; Building and Construction, 11.3 per cent.; Public Authority (n.e.i.) and Professional Activities, 9.1 per cent.; and Transport and Storage, 8.4 per cent.

As with males, females in the work force were engaged mainly in Manufacturing, 26.9 per cent., followed in order by those in Commerce, 22.5 per cent.; Public Authority (n.e.i.) and Professional Activities, 22.1 per cent.; and Amusement, Hotels, Cafés, Personal Service, etc., 14.8 per cent.

**POPULATION CLASSIFIED ACCORDING TO INDUSTRY: AUSTRALIA,  
CENSUS, 30th JUNE, 1954.**

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Industry Group and Sub-group.	Males.	Females.	Persons.	
			Number.	Proportion of Total. (Per cent.)
<b>Primary Production—</b>				
Fishing, Hunting and Trapping ..	10,003	126	10,129	0.11
Agriculture, Mixed Farming ..	220,218	12,172	232,390	2.59
Grazing .. .. .	115,162	8,714	123,876	1.38
Dairying .. .. .	100,553	11,004	111,557	1.24
Forestry .. .. .	15,279	67	15,346	0.17
<b>Total .. .. .</b>	<b>461,215</b>	<b>32,083</b>	<b>493,298</b>	<b>5.49</b>
<b>Mining and Quarrying .. ..</b>	<b>60,310</b>	<b>1,061</b>	<b>61,371</b>	<b>0.68</b>
<b>Manufacturing—</b>				
Founding, Engineering and Metalworking	229,431	32,305	261,736	2.91
Manufacture, Assembly and Repair of Ships, Vehicles, Parts and Accessories	132,653	6,463	139,116	1.55
Textile and Fibrous Materials (not Dress)	27,601	26,182	53,783	0.60
Clothing and Knitted Goods (including Needleworking) .. .. .	23,144	73,367	96,511	1.07
Food, Drink and Tobacco .. ..	117,088	27,927	145,015	1.61
Sawmilling and Manufacture of Wood Products .. .. .	53,252	2,136	55,388	0.62
Paper and Paper Products, Printing, Bookbinding and Photography ..	53,953	18,770	72,723	0.81
Other and Undefined .. .. .	163,146	39,913	203,059	2.26
<b>Total .. .. .</b>	<b>800,268</b>	<b>227,063</b>	<b>1,027,331</b>	<b>11.43</b>
<b>Electricity, Gas, Water and Sanitary Services (Production, Supply and Maintenance)..</b>	<b>69,554</b>	<b>4,096</b>	<b>73,650</b>	<b>0.82</b>
<b>Building and Construction—</b>				
Construction and Repair of Buildings ..	196,205	2,452	198,657	2.21
Construction Works (other than Build- ings) .. .. .	125,624	1,341	126,965	1.41
<b>Total .. .. .</b>	<b>321,829</b>	<b>3,793</b>	<b>325,622</b>	<b>3.62</b>
<b>Transport and Storage—</b>				
Road Transport and Storage .. ..	92,990	4,488	97,478	1.08
Shipping and Loading and Discharging Vessels .. .. .	55,905	2,180	58,085	0.65
Rail and Air Transport .. .. .	91,691	8,031	99,722	1.11
<b>Total .. .. .</b>	<b>240,586</b>	<b>14,699</b>	<b>255,285</b>	<b>2.84</b>
<b>Communication .. .. .</b>	<b>63,802</b>	<b>16,748</b>	<b>80,550</b>	<b>0.90</b>
<b>Finance and Property; Business Services (n.e.i.) .. .. .</b>	<b>64,366</b>	<b>34,278</b>	<b>98,644</b>	<b>1.10</b>
<b>Commerce .. .. .</b>	<b>387,468</b>	<b>189,913</b>	<b>577,381</b>	<b>6.43</b>
<b>Public Authority (n.e.i.) and Professional Activities .. .. .</b>	<b>260,474</b>	<b>186,443</b>	<b>446,917</b>	<b>4.97</b>
<b>Amusement, Hotels, Cafés, Personal Ser- vice, etc. .. .. .</b>	<b>99,003</b>	<b>125,486</b>	<b>224,489</b>	<b>2.50</b>
<b>Other, Inadequately Described or Not Stated .. .. .</b>	<b>27,745</b>	<b>9,739</b>	<b>37,484</b>	<b>0.42</b>
<b>Persons in the Work Force ..</b>	<b>2,856,620</b>	<b>845,402</b>	<b>3,702,022</b>	<b>41.20</b>
<b>Persons not in the Work Force ..</b>	<b>1,689,498</b>	<b>3,595,010</b>	<b>5,284,508</b>	<b>58.80</b>
<b>Total .. .. .</b>	<b>4,546,118</b>	<b>4,440,412</b>	<b>8,986,530</b>	<b>100.00</b>

9. **Occupational Status.**—The term "occupational status" relates to the capacity in which persons are engaged in the various branches of industry.

While the numbers of employers and of persons self-employed at the 1954 Census showed increases of approximately 13 per cent. and 6 per cent., respectively, as compared with 1947, the number of employees increased by slightly more than 20 per cent., and in 1954 constituted nearly 80 per cent. of the total work force, as compared with 77 per cent. in 1947. Employers and self-employed combined constituted 17.8 per cent. of the work force in 1954 as compared with 19.0 per cent. in 1947.

**POPULATION : OCCUPATIONAL STATUS, AUSTRALIA, 1947 AND 1954.**  
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Occupational Status.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
<b>In Work Force—</b>							
<b>At Work—</b>							
Employer .. .. .	196,932	24,357	221,289	220,408	30,028	250,436	29,147
Self-employed .. .. .	342,650	44,487	387,137	358,746	51,436	410,182	23,045
Employee (on wage or salary) .. .. .	1,827,072	620,421	2,447,493	2,211,915	737,488	2,949,403	501,910
Helper (not on wage or salary) .. .. .	24,227	4,498	28,725	18,342	9,866	28,208	- 517
<b>Total at Work .. .. .</b>	<b>2,390,881</b>	<b>693,763</b>	<b>3,084,644</b>	<b>2,809,411</b>	<b>828,818</b>	<b>3,638,229</b>	<b>553,585</b>
<b>Not at Work(a) .. .. .</b>	<b>66,009</b>	<b>16,765</b>	<b>82,774</b>	<b>40,913</b>	<b>13,953</b>	<b>54,866</b>	<b>-27,908</b>
<b>Not Stated .. .. .</b>	<b>22,379</b>	<b>6,634</b>	<b>29,013</b>	<b>6,296</b>	<b>2,631</b>	<b>8,927</b>	<b>-20,086</b>
<b>Total in Work Force .. .. .</b>	<b>2,479,269</b>	<b>717,162</b>	<b>3,196,431</b>	<b>2,856,620</b>	<b>845,402</b>	<b>3,702,022</b>	<b>505,591</b>
<b>Not in Work Force .. .. .</b>	<b>1,318,101</b>	<b>3,064,826</b>	<b>4,382,927</b>	<b>1,689,498</b>	<b>3,595,010</b>	<b>5,284,508</b>	<b>901,581</b>
<b>Grand Total .. .. .</b>	<b>3,797,370</b>	<b>3,781,988</b>	<b>7,579,358</b>	<b>4,546,118</b>	<b>4,440,412</b>	<b>8,986,530</b>	<b>1,407,172</b>

(a) Includes persons who were (1) unable to secure employment; (2) temporarily laid off from their jobs; or (3) not actively seeking work at the time of the Census on account of sickness or accident, industrial dispute, resting between jobs or for any other reason.

NOTE.—Minus sign (-) denotes decrease.

10. **Race.**—The term "Race" as used for Census purposes is not synonymous with ethnic group, but is based on geographical rather than ethnological descriptions. The form of inquiry at the 1954 Census was:—"For persons of European Race, wherever born, write 'European'. For non-Europeans, state the race to which they belong, for example, 'Aboriginal', 'Chinese', 'Negro', 'Afghan', etc. If the person is half-caste with one parent of European race, write also 'H.C.', for example 'H.C. Aboriginal', 'H.C. Chinese', etc." The complementary instruction was:—"In the case of a person both of whose parents are non-European but of different races, state the race of that person's father (and do *not* add 'H.C.')." This form of inquiry and the instruction are identical with those used at the 1947 Census. It follows that, as the essential distinction is between European and non-European races only, those having European blood to the extent of one half have been classed as half-castes of the non-European race.

A summary for the 1947 and 1954 Censuses is shown in the following table.

## POPULATION: RACE, AUSTRALIA, 1947 AND 1954.

(Excluding Full-blood Aborigines.)

Race.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Full-blood— European .. ..	3,765,238	3,758,891	7,524,129	4,508,795	4,412,896	8,921,691	1,397,562
Non-European—							
Arab .. ..	100	38	138	197	65	262	124
Chinese .. ..	6,594	2,550	9,144	9,150	3,728	12,878	3,734
Cingalese .. ..	97	53	150	196	72	268	118
Filipino .. ..	133	102	235	127	100	227	— 8
Indian(a) .. ..	2,278	202	2,480	1,892	317	2,209	—271
Japanese .. ..	108	49	157	247	292	539	382
Javanese, Indonesian, Koepanger .. ..	84	23	107	311	36	347	240
Malay .. ..	425	155	580	534	251	785	205
Pacific Islander (n.e.i.) <sup>b</sup> Torres Strait Islander	2,840	2,492	5,332	1,070	814	1,884	805
Siamese, Thailander ..	15	12	27	2,043	2,210	4,253	196
Syrian, Lebanese ..	888	787	1,675	163	60	223	615
Asiatic (n.e.i.) ..	1,045	425	1,470	1,374	916	2,290	—149
Other and Indefinite				848	221	1,069	
				180	72	252	
Total, Non-European Full-blood .. ..	14,607	6,888	21,495	18,332	9,154	27,486	5,991
Half-caste—							
Arab .. ..	6	2	8	16	11	27	19
Australian Aboriginal	14,026	13,153	27,179	15,849	15,510	31,359	4,180
Chinese .. ..	1,599	1,351	2,950	1,404	1,276	2,680	—270
Cingalese .. ..	51	53	104	58	65	123	19
Filipino .. ..	111	103	214	101	100	201	— 13
Indian(a) .. ..	235	183	418	259	179	438	20
Japanese .. ..	91	87	178	114	132	246	68
Javanese, Indonesian, Koepanger .. ..	32	24	56	11	21	32	— 24
Malay .. ..	196	198	394	214	235	449	55
Pacific Islander (n.e.i.) <sup>b</sup> Torres Strait Islander	359	353	712	371	366	737	134
Siamese, Thailander ..	2	6	8	60	49	109	35
Syrian, Lebanese ..	111	112	223	25	18	43	— 24
Asiatic (n.e.i.) ..	706	584	1,290	103	96	199	— 24
Other and Indefinite ..				140	102	242	—580
				266	202	468	
Total, Half-caste ..	17,525	16,209	33,734	18,991	18,362	37,353	3,619
Total, Non-European Full-blood and Half-caste .. ..	32,132	23,097	55,229	37,323	27,516	64,839	9,610
Grand Total .. ..	3,797,370	3,781,988	7,579,358	4,546,118	4,440,412	8,986,530	1,407,172

(a) Native of India or Pakistan.  
and South Sea Islander, so described.

(b) Includes Fijian, Maori, Papuan, Pacific Islander, Polynesian

11. Other General Characteristics.—Questions asked at the 1933 Census regarding orphanhood, and the ability to read and write a foreign language (of persons who could not read and write English), were not asked on the schedules of the 1947 and 1954 Censuses and the question on dependent children asked at the 1947 Census was not asked in 1954. The latest data published in respect of the first two questions appear on pages 482 and 487 of Official Year Book No. 36, and in respect of dependent children on page 326 of Official Year Book No. 41.

## § 8. Oversea Migration.

1. Oversea Migration during the Present Century.—Earlier issues of the Official Year Book contain, in summary form, tables showing the increase of population by net migration from 1861 to the latest date, while information for individual years is published in the annual bulletin, *Demography*. The following table shows, for Australia, arrivals and departures and net migration since 1901. A graph showing arrivals and departures from 1921 to 1958 appears on page 298.

## OVERSEA MIGRATION : AUSTRALIA.

Period.	Arrivals.			Departures.			Net Migration.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
1901-05 ..	196,993	84,167	281,160	204,170	93,783	297,953	- 7,177	- 9,616	- 16,793
1906-10 ..	251,482	119,552	371,034	213,483	100,273	313,756	37,999	19,279	57,278
1911-15 ..	422,927	209,893	632,820	382,552	113,406	495,958	40,375	96,487	136,862
1916-20 ..	438,721	100,764	539,485	390,202	78,574	468,776	48,519	22,190	70,709
1921-25 ..	289,695	188,357	478,052	172,236	122,550	294,786	117,459	65,807	183,266
1926-30 ..	266,593	203,887	470,480	193,336	147,437	340,773	73,257	56,450	129,707
1931-35 ..	124,207	115,116	239,323	134,883	115,326	250,209	- 10,676	210	- 10,886
1936-40(a)	161,774	159,538	321,312	140,901	137,283	278,184	20,873	22,255	43,128
1941-45(a)	35,422	28,503	63,925	30,097	26,019	56,116	5,325	2,484	7,809
1946-50(a)	398,507	303,413	701,920	180,779	168,057	348,836	217,728	135,356	353,084
1951-55 ..	581,300	446,566	1,027,866	340,819	273,223	614,042	240,481	173,343	413,824
1954 ..	109,601	88,424	198,025	72,073	57,745	129,818	37,528	30,679	68,207
1955 ..	133,463	103,774	237,237	76,805	63,177	139,982	56,658	40,597	97,255
1956 ..	141,408	106,040	247,448	87,013	66,437	153,450	54,395	39,603	93,998
1957 ..	123,487	109,841	233,328	87,081	67,515	154,596	36,406	42,326	78,732
1958 ..	121,030	109,234	230,264	91,367	73,531	164,898	29,663	35,703	65,366

(a) Excludes movements of defence personnel from September, 1939 to June, 1947.

NOTE.—Minus sign (-) indicates excess of departures over arrivals.

As the encouragement of immigration by governmental assistance has been a feature of Australian immigration policy, a clear indication of the significance of migration movements is obtained when "assisted" and "unassisted" movements are distinguished. This was shown broadly, for the period 1901-1952, in Official Year Book No. 40, page 361, and has been continued in the following table for the period 1926 to 1958.

## "ASSISTED" AND "UNASSISTED" MIGRATION : AUSTRALIA.

Period.	Arrivals.			Departures.	Excess of "Un-assisted" Arrivals over All Departures.
	Nominated and Selected ("Assisted").	Other ("Un-assisted").	Total.		
1926-30 ..	99,403	371,077	470,480	340,773	30,304
1931-35 ..	781	238,542	239,323	250,209	- 11,667
1936-40(a)	3,828	317,484	321,312	278,184	39,300
1941-45(a)	..	63,925	63,925	56,116	7,809
1946-50(a)	273,195	428,725	701,920	348,836	79,889
1951-55 ..	275,241	752,625	1,027,866	614,042	138,583
1954 ..	54,038	143,987	198,025	129,818	14,169
1955 ..	66,688	170,549	237,237	139,982	30,567
1956 ..	54,957	192,491	247,448	153,450	39,041
1957 ..	62,361	170,967	233,328	154,596	16,371
1958 ..	55,799	174,465	230,264	164,898	9,567

(a) Excludes movements of defence personnel from September, 1939 to June, 1947.

NOTE.—Minus sign (-) indicates excess of departures over "unassisted" arrivals.

It is not possible in the statistics of departures to distinguish the return movement of persons who came to Australia as "assisted" migrants from that of "unassisted" migrants. Consequently, the separate net migration of "assisted" and "non-assisted" persons cannot be ascertained. Nevertheless, the basis on which the above table has been compiled is sufficient to throw into relief the major trends in Australian migration statistics in the period reviewed.

Although separate net migration figures are not available, it is generally agreed that Australia has gained considerably more population through its encouraged migration programme than it has from non-assisted migration.

A detailed review of assisted migration into Australia in recent years is given in § 9.

2. *Classification of Arrivals and Departures.*—(i) *General.* Since 1st July, 1924, overseas travellers have been classified according to declared intention in regard to residence made at the time of arrival or departure. Certain of the headings previously used in this classification have now been changed to ensure more accurate definition and to assist in interpretation of the figures. The figures themselves, however, are exactly comparable with those published in previous issues.

“Long Term and Permanent Movement” (formerly described as “Permanent Movement”) relates to *persons arriving* who state that they intend to reside in Australia for a period of one year or more; and to *persons departing* who state that they intend to reside abroad for a period of one year or more.

“Short Term Movement” (formerly described as “Temporary Movement”) relates to *persons arriving* who state that they intend to reside in Australia for a period of less than one year; and to *persons departing* who state that they intend to reside abroad for a period of less than one year.

These definitions are in accordance with international usage and do not purport to represent permanent migration as such. For various reasons the intentions of travellers are subject to subsequent modification and the classification headings used must therefore be accepted as indicating intention only. The numbers so classified since 1st January, 1926, are as follows:—

**ARRIVALS AND DEPARTURES CLASSIFIED ACCORDING TO INTENDED RESIDENCE : AUSTRALIA.**

Period.	Arrivals.				Departures.			
	Long Term and Permanent Movement. (a)	Short Term Movement. (a)		Total.	Long Term and Permanent Movement. (a)	Short Term Movement. (a)		Total.
		Australian Residents Returning.	Visitors Arriving.			Australian Residents Departing.	Visitors Departing.	
1926-30 ..	224,010	121,395	125,029	b 470,480	103,209	111,714	125,772	c 340,773
1931-35 ..	54,444	84,554	100,325	239,323	71,670	79,426	99,108	d 250,209
1936-40 ..	(e) 88,712	104,870	127,730	321,312	51,006	94,650	132,528	278,184
1941-45 ..	(e) 32,624	11,150	20,151	63,925	22,399	9,163	24,554	56,116
1946-50 ..	457,988	108,736	135,196	701,920	105,968	101,787	141,081	348,836
1951-55 ..	570,090	216,949	240,827	1,027,866	155,509	212,978	245,555	614,042
1954 ..	104,014	44,944	49,067	198,025	35,449	45,701	48,668	129,818
1955 ..	130,795	52,877	53,565	237,237	35,478	52,180	52,324	139,982
1956 ..	123,822	57,608	66,018	247,448	37,717	51,400	64,333	153,450
1957 ..	118,695	56,017	58,616	233,328	41,073	53,438	60,085	154,596
1958 ..	109,857	59,065	61,342	230,264	44,978	58,888	61,032	164,898

(a) For definitions of long term and permanent and short term movement see letterpress above. (b) Includes 46 arrivals whose intended period of residence was not stated. (c) Includes 78 departures whose intended length of stay abroad was not stated. (d) Includes 5 departures whose intended length of stay abroad was not stated. (e) Includes evacuees arriving in Australia during the war years as follows:—1936-40, 4,543; 1941-45, 12,586.

(ii) *Long Term and Permanent Movement.* The 1939-45 War caused a large drop, from 1940, in the number of arrivals but after the war the number rose progressively, reaching 174,540 in 1950, the highest on record. As in the case of arrivals, although not to the same extent, the number of departures rose rapidly in the period of immediate post-war re-adjustment of population, but the high figure of 29,806 in 1946 was surpassed in each of the years 1952 to 1958, which were higher than any recorded since the introduction of the method of classification in 1924.

Up to and including 1929, there was a considerable net gain from long term and permanent movement, but during 1930 and 1931 there was a heavy net loss. The loss was very much reduced in 1932, 1933 and 1934, whilst during the five years up to and including

1939 there was a net gain of more than 28,000. Except for the arrival of evacuees, little movement took place during the war period, but in 1946 a net loss of 11,589 persons occurred, owing in large measure to the departure for the United States of America of Australian wives and children of American servicemen, and, when conditions permitted after the war, the departure of Australians to Papua and New Guinea and of large numbers of war evacuees who were returned to their home countries. Subsequently, the largest net gain recorded was 153,685 in 1950. A net gain of 64,879 was recorded in 1958.

(iii) *Short Term Movement.* Short term movement refers to persons intending residence for periods of less than one year and includes Australian residents and visitors from overseas. Since 1st July, 1947, it also includes Australian defence personnel irrespective of intended length of residence. Although considerable in number, the short term movement is of little significance from the point of view of population growth, as it represents principally the movement of people travelling on business or for pleasure.

3. *Extent of Journey.*—Since 1st January, 1945, the journeys undertaken by passengers have been recorded for Australian oversea migration statistics in two ways: (a) according to country of embarkation or disembarkation and (b) according to country of last or intended future residence.

Detailed statistics of oversea journeys are published in the annual bulletin, *Demography*.

4. *Nationality.*—From 1st July, 1924, to 30th June, 1948, nationality of oversea passengers was recorded as "British" or "Alien" only. Racial origin was also recorded and as the particulars of racial origin stated by passengers closely reflected their nationalities and made it possible to present much more detail of "nationality" than was possible on the total "Alien" basis, published statistics were confined mainly to those compiled on the detailed basis according to a composite classification of "nationality or race".

This method was superseded on 1st July, 1948 by one in which each passenger's race was recorded as European, Asian, African or Polynesian and nationality, as shown on each passenger's passport or other document of identification, was recorded independently of race. The principal nationalities recorded on this basis for the years 1956 to 1958 are as follows:—

NATIONALITY OF ARRIVALS AND DEPARTURES: AUSTRALIA.

Nationality.	Arrivals.			Departures.			Net Migration.		
	1956.	1957.	1958.	1956.	1957.	1958.	1956.	1957.	1958.
British(a)	155,136	151,391	163,303	124,793	127,611	134,991	30,343	23,780	28,312
American(U.S.)	8,075	7,788	8,272	7,870	7,778	8,150	205	10	122
Austrian	3,553	2,009	1,464	317	534	743	3,236	1,475	721
Chinese	1,464	1,416	1,524	1,100	1,202	1,004	364	214	520
Czechoslovak	267	107	102	301	133	140	-34	-26	-38
Dutch	13,900	10,041	9,905	4,173	4,068	4,376	9,727	5,973	5,529
Estonian	18	14	14	31	18	23	-13	-4	-9
French	2,492	1,948	1,772	2,300	1,888	1,716	192	60	56
German	6,978	6,260	6,796	2,040	2,390	2,968	4,938	3,870	3,828
Greek	12,183	7,423	5,548	503	816	897	11,680	6,607	4,651
Hungarian	718	11,435	779	232	143	309	486	11,292	470
Italian	28,521	18,182	13,974	3,376	3,691	4,312	25,145	14,491	9,662
Latvian	55	25	24	40	30	7	-7	-15	-6
Lithuanian	23	19	9	62	20	30	-43	-1	-41
Polish(b)	382	593	1,660	271	159	229	111	434	1,431
Russian(c)	934	1,423	583	638	73	190	296	1,350	393
Ukrainian	45	26	22	55	35	96	-10	9	-74
Yugoslav	1,237	1,395	1,343	217	170	244	1,020	1,225	1,099
Stateless (so described)	1,974	5,278	5,785	255	257	398	1,719	5,021	5,387
Stateless (other)d	16	80	26	3	16	10	13	64	16
Other	9,477	6,475	7,359	4,847	3,554	4,022	4,630	2,921	3,337
Total	247,448	233,328	230,264	153,450	154,596	164,898	93,998	78,732	65,366

(a) Irish nationality is included with British for the purpose of this table. (b) Includes "Stateless" who were formerly Polish. (c) Includes "Stateless" who were formerly Russian. (d) Stateless, with former nationality stated but other than Polish or Russian.

NOTE.—Minus sign (—) indicates excess of departures over arrivals.

5. **Age Distribution and Conjugal Condition.**—A summary of the age distribution and conjugal condition of arrivals and departures classified as long term and permanent movement during 1958 is as follows:—

**LONG TERM AND PERMANENT MOVEMENT(a): AGE DISTRIBUTION AND CONJUGAL CONDITION OF ARRIVALS AND DEPARTURES, AUSTRALIA, 1958.**

Age Group (Years).	Arrivals.			Departures.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
<b>AGE DISTRIBUTION.</b>						
0-14 .. ..	15,797	14,659	30,456	4,420	4,286	8,706
15-44 .. ..	31,928	34,374	66,302	15,461	12,574	28,035
45-64 .. ..	4,566	5,991	10,557	2,966	3,339	6,305
65 and over .. ..	952	1,590	2,542	813	1,119	1,932
<b>Total .. ..</b>	<b>53,243</b>	<b>56,614</b>	<b>109,857</b>	<b>23,660</b>	<b>21,318</b>	<b>44,978</b>
<b>CONJUGAL CONDITION.</b>						
Never Married .. ..	32,644	29,657	62,301	14,181	10,401	24,582
Married .. ..	19,950	23,880	43,830	8,947	9,067	18,014
Widowed .. ..	418	2,544	2,962	366	1,575	1,941
Divorced .. ..	231	533	764	166	275	441
<b>Total .. ..</b>	<b>53,243</b>	<b>56,614</b>	<b>109,857</b>	<b>23,660</b>	<b>21,318</b>	<b>44,978</b>

(a) For definition of long term and permanent movement see para. 2 (i), p. 312.

6. **Occupation.**—The following is a summary of the main occupational groups of males classified to long-term and permanent movement (see para. 2 (i) on p. 312) during 1958:—  
**Arrivals**—Rural, fishing and hunting, 2,039; professional and semi-professional, 2,660; administrative, 1,061; commercial and clerical, 4,443; domestic and protective service, 1,165; craftsmen, 11,798; operatives, 6,082; labourers, 2,638; indefinite or not stated, 1,798; not gainfully occupied (mainly children), 19,559; total, 53,243. **Departures**—Rural, fishing and hunting, 797; professional and semi-professional, 2,288; administrative, 857; commercial and clerical, 2,852; domestic and protective service, 860; craftsmen, 4,849; operatives, 1,887; labourers, 2,908; indefinite or not stated, 497; not gainfully occupied (mainly children), 5,865; total, 23,660.

### § 9. Assisted Migration into Australia.

1. **Joint Commonwealth and States Scheme.**—Details of the joint scheme of assisted immigration arrived at by agreement between the Commonwealth and State Governments, which operated from 1920 to 1939, were published in earlier issues of the Official Year Book (see No. 38, p. 576). After the outbreak of hostilities in 1939, it was decided to discontinue the grant of assisted passages for the duration of the war.

2. **United Kingdom Free and Assisted Passage Agreements, March, 1946.**—(i) *General.* Resumption of migration was the subject of negotiations between the Commonwealth and United Kingdom Governments towards the end of 1945 and two agreements were signed in March, 1946. These agreements, which came into operation on 31st March, 1947, provided for free and assisted passages to be granted to British residents desirous of settling in Australia. The Free Passage Agreement was terminated on 28th February, 1955. From 1st April, 1949, the Assisted Passage Agreement continued in operation under renewal from time to time and has again been renewed as from 1st April, 1957.

(ii) *Assisted Passages.* Under the existing financial arrangements, the United Kingdom Government's contribution towards the Assisted Passage Scheme is agreed upon when the Agreement is extended, and for the five years from 1st April, 1957, is fixed at a maximum amount of £150,000 sterling a year.

The Assisted Passage Agreement covers five main groups of migrants (and their families), namely, personal nominees, group nominees, Commonwealth nominees, "Bring out a Briton" campaign families and unominated single men and women and married couples without children. *Personal nominees* are migrants sponsored by residents of Australia able to provide suitable accommodation for them (any adult resident of Australia may nominate friends or relatives in the United Kingdom who are eligible to be considered for assisted passages under this agreement). *Group nominees* are recruited on a trade-qualification basis to meet applications lodged by employers and State Governments, who guarantee to provide employment and accommodation for those selected; *Commonwealth nominees* comprise workers selected against known and assessed employment demands in Australia. Migrants in this group can live in hostels established by the Commonwealth Government for up to two years while they are seeking to obtain private accommodation. The Commonwealth nominee scheme was introduced in 1950 in order to reinforce the personal and group nomination schemes. "*Bring out a Briton*" campaign families are selected to fill employment and accommodation vacancies located by special voluntary committees formed by community effort to stimulate the flow of British migrants who are otherwise unable to obtain sponsorship. *Unominated single men and women and married couples without children* may also be granted assisted passages, even though they are unable to arrange personal nominations and are not occupationally qualified for approval under other existing assisted passage selection schemes. They must possess on arrival a minimum of £25 sterling in the case of single persons and £50 sterling in the case of married couples without children, and must comply in the United Kingdom with the normal selection criteria for assisted passages. If necessary, hostel accommodation is provided by the Commonwealth.

Although the Commonwealth is not generally prepared to accept single persons or married persons without children if they have reached their forty-sixth birthday before the date of sailing, the parents or close relatives of intending migrants or of persons established in Australia may, if otherwise acceptable under the scheme, be granted passages irrespective of age. Each migrant of 19 years of age and over is required to contribute £10 sterling towards the cost of his or her passage, while persons under 19 years travel free. Apart from this contribution and that made annually by the United Kingdom Government, the cost of the passages is borne by the Commonwealth Government.

(iii) *Number of Arrivals.* The numbers of British migrants who came to Australia under the Free and Assisted Passage Agreement during the years 1947 to 1958 are given in the following table:—

**UNITED KINGDOM FREE AND ASSISTED PASSAGE AGREEMENT: NUMBER OF MIGRANTS.(a)**

Period.	N.S.W.	Vic.	Qld.	S. Aust.	W.Aust.	Tas.	A.C.T.	C'wealth Nominees.	Total.
1947-52 ..	41,756	48,985	21,176	12,407	16,601	6,242	2,358	27,367	176,892
1953 ..	3,890	3,962	1,835	1,072	1,969	485	110	372	13,695
1954 ..	3,046	3,199	1,872	1,406	2,067	425	97	6,605	18,717
1955 ..	4,743	6,068	2,731	1,756	2,219	672	119	7,389	25,697
1956 ..	4,231	5,516	2,471	1,814	2,231	602	189	7,082	24,136
1957 ..	4,994	5,184	3,219	2,197	1,774	749	220	6,665	25,002
1958(b) ..	5,921	6,392	3,568	3,239	2,400	930	199	9,338	31,987
<b>Total, 1947-58</b>	<b>68,581</b>	<b>79,306</b>	<b>36,872</b>	<b>23,891</b>	<b>29,261</b>	<b>10,105</b>	<b>3,292</b>	<b>64,818</b>	<b>316,126</b>

(a) Includes child migrants as shown in para. 3 (iii) below.

(b) Preliminary.

3. *Child Migration from the United Kingdom.*—(i) *General.* Since the commencement of the assisted passage schemes in 1947, the immigration of unaccompanied children and youths from the United Kingdom has been encouraged under the auspices of approved voluntary organizations. The organizations at present introducing child migrants include the

Fairbridge Farm Schools, Dr. Barnardo's Homes, the Big Brother Movements of New South Wales and Tasmania, and the Northcote Children's Emigration Fund. All the principal religious denominations are also participating in the scheme. There are 34 approved Homes in Australia caring for 590 child migrants.

(ii) *Financial Assistance.* The United Kingdom Government contributes 12s. 6d. a week for each child and the respective State Governments contribute amounts varying from 7s. a week in New South Wales to £1 3s. 3d. in Western Australia. The Commonwealth Government pays the normal child endowment of 10s. a week. In addition, the Commonwealth Government and the State Government concerned may contribute towards the capital expenditure on accommodation for child migrants.

(iii) *Number of Arrivals.* From the beginning of 1947 to the end of 1958, a total of 4,989 British children and youths arrived under the sponsorship of voluntary organizations. New South Wales took 2,849, Western Australia 1,244, Victoria 489 and the other three States 407. These children were brought to Australia under the United Kingdom Free and Assisted Passage Scheme and are included in the figures shown in the table above.

4. *Assisted Passage Scheme, Eire.*—In November, 1948, the Commonwealth Government decided to grant limited financial assistance to natural-born citizens of Eire normally residing in the British Isles, and to natural-born British citizens residing in Eire, who wish to emigrate to Australia and who are duly selected. This scheme applies only to prospective settlers and their dependants who are not eligible for assisted passages under the agreement with the United Kingdom Government (*see* para. 2 above). The maximum amount granted towards an adult passage is £30 sterling, with varying amounts for children according to age.

It is not essential for an applicant for a passage to be nominated by a friend or relative in Australia before the question of granting financial assistance is considered. Single men and women who are eligible under the scheme are readily accepted. Families, on the other hand, are accepted only if they can produce evidence of having secured accommodation in Australia, or, in the case of nominated migrants, a guarantee of accommodation by their sponsors. Up to the end of 1958, 3,300 migrants had arrived under this scheme.

5. *Maltese Migration.*—On 31st May, 1948, the Commonwealth Government and the Government of Malta entered into an agreement under which both Governments grant financial assistance towards the passage costs of selected Maltese migrants. The Commonwealth contribution is £30 sterling per adult, with proportionate amounts for children, and the Government of Malta contributes an amount at least equal to this sum. This agreement has been extended from time to time. On 13th August, 1957 a new agreement, which is acknowledged to have come into effect as from 1st July, 1956, was signed between the two Governments. This agreement is of 2 years' duration, and has subsequently been extended to 30th June, 1959.

From its inception until 31st December, 1958, a total of 23,771 Maltese had arrived under this scheme. Up to the end of 1958, 232 Maltese children had been brought out to approved institutions in Australia. These are included in the number shown above.

6. *Empire and Allied Ex-Servicemen's Scheme.*—On 26th May, 1947, the Commonwealth Government implemented a scheme under which assistance was given to the passage costs of Empire ex-servicemen and their dependants not covered by the Free and Assisted Passage Scheme (*see* para. 2 above) and of ex-servicemen of the U.S.A. Later, eligibility was extended to ex-servicemen and resistance workers of the Netherlands, Norway, France, Belgium and Denmark. The amount of assistance for an adult was £30 sterling and amounts for children varied according to age. The scheme was discontinued as from 30th June, 1955.

During its currency a total of 21,333 migrants came to Australia under the scheme. The majority of these (16,830) were Dutch.

7. *Displaced Persons Scheme.*—On 21st July, 1947, the Commonwealth Government entered into an agreement with the International Refugee Organization to settle displaced persons in Australia. Although the International Refugee Organization wound up its

activities in 1951, the Commonwealth agreed to receive those displaced persons already accepted for migration, but whose passages had still to be arranged. A total of 170,700 persons settled in Australia under this scheme. Since the cessation of the Displaced Persons Scheme, substantial numbers of refugees have migrated to Australia under both assisted and full-fare arrangements (*see para. 14*).

**8. Netherlands Migration.**—A migration agreement concluded between the Commonwealth and Netherlands Governments in February, 1951, came into operation on 1st April of that year. On 1st August, 1956, the agreement was extended for a period of 5 years with retroactive effect as from 1st April, 1956. This superseded an earlier arrangement in 1946 between the Commonwealth and the Netherlands Emigration Foundation (*see Official Year Book No. 39, p. 567*).

The migrant is required to contribute towards his passage costs in accordance with a formula devised by the Netherlands Government. The balance is met by the Commonwealth and Netherlands Governments and the Intergovernmental Committee for European Migration. The Commonwealth Government's contribution is now equivalent to \$110 a head.

The provision of shipping is the responsibility of the Netherlands Government. The Commonwealth arranges for the reception of migrants and their after-care and assists in the securing of employment. Families who have not obtained private accommodation prior to arrival may be temporarily accommodated in an Immigration Centre. When the breadwinner is placed in employment, the proceeds either to employer-found accommodation or a Commonwealth Hostel. These arrangements continue until the family can secure its own accommodation, or vacancies enable a family to be united in a hostel.

Up to the end of December, 1958, 44,158 Dutch migrants had settled here under the Netherlands-Australia Migration Agreement.

**9. Italian Migration.**—On 29th March, 1951, the Commonwealth and Italian Governments entered into a migration agreement effective for a period of 5 years, under which certain selected Italian migrants were assisted to Australia. The agreement came into force on 1st August, 1951.

The agreement was temporarily suspended at the end of 1952, but in March, 1954, provision was made for assisted passages to be granted to certain relatives and fiancées of migrants who had previously settled in Australia under the agreement. On 1st December, 1954, the agreement proper was re-opened and it was subsequently extended to 30th June, 1959. At present the Commonwealth contributes the equivalent of \$100 towards the fare of each migrant. The balance of passage costs is contributed by the migrants themselves, the Italian Government and the Intergovernmental Committee for European Migration. Up to 31st December, 1958, arrivals under this agreement totalled 35,985 persons.

As the Italian agreement does not provide for the acceptance of nationals other than Italian, a special quota is determined annually for the selection of suitable refugees from other nationals living in Italy. Arrivals under this "Non-Italian National Quota" (N.I.N.Q.) totalled 2,093 between 1st July, 1955, and 31st December, 1958.

**10. Migration from Trieste.**—In 1953, arrangements were made for the migration of refugees from Trieste. These arrangements continued until what was formerly the Free Territory of Trieste became part of the Italian Republic. Since then, migrants from Trieste have proceeded under the Italian Agreement. Altogether, 4,745 Triestians arrived in Australia as assisted migrants up to 30th June, 1955. The Commonwealth made a contribution to passage costs at the same rate as for other European migrants and the balance was made up by contributions from the Intergovernmental Committee for European Migration and the Italian Government.

**11. German Migration.**—On 29th August, 1952, a migration agreement was signed between the Commonwealth Government and the Government of the Federal Republic of Germany. This was somewhat similar to the agreements concluded with the Netherlands and Italy and was effective for a period of 5 years. The Agreement was renewed on 27th August, 1958, to be effective from 29th August, 1957. The Commonwealth Government's contribution towards passage costs is the equivalent of \$100 per head. The migrant may

be required to pay a small contribution and the balance of passage costs is paid by the Intergovernmental Committee for European Migration. The ICEM payment is derived in part from a lump sum contribution which the Government of the Federal Republic of Germany makes annually to the Committee. Arrivals of German assisted migrants numbered 41,838 to the end of December, 1958.

**12. Austrian Migration.**—Late in 1952, arrangements were made with the Intergovernmental Committee for European Migration for the migration to Australia of a small number of selected rural and other workers and their families from Austria. Later, these arrangements were extended to cover greater numbers and wider categories of migrants. The Commonwealth contributes an amount equivalent to \$100 a head towards the passage costs of Austrian migrants. The Austrian Government, the Intergovernmental Committee for European Migration and the migrants themselves also contribute towards passage costs. Reception arrangements, temporary accommodation, after-care and placement in employment are undertaken by the Commonwealth. Under these arrangements, 12,453 Austrians arrived in Australia up to 31st December, 1958.

**13. Greek Migration.**—An arrangement similar to the Austrian one was made with the Intergovernmental Committee for European Migration late in 1952. The Commonwealth's contribution and the arrangements for reception, accommodation, employment and after-care are the same as for Austrian migrants. Under this arrangement 22,921 Greek assisted migrants had settled in Australia up to 31st December, 1958.

**14. Hungarian Migration.**—On 5th November, 1956, the Intergovernmental Committee for European Migration and the United Nations High Commissioner for Refugees, in accordance with a request received from the Austrian Government, appealed to Member Governments to give asylum to the greatest possible number of Hungarian refugees who were fleeing in thousands across the border into Austria, following Russian military action in Hungary.

On 8th November, 1956, the Minister for Immigration announced that Australia would provide permanent asylum for up to 3,000 Hungarian refugees during the year 1956–57. The Australian migration representative in Austria was instructed to begin selection of the refugees immediately, and was advised that normal standards should be applied with understanding and flexibility. Early in December, 1956, the Government decided that the number of Hungarian refugees to be received during the year 1956–57 should be increased from 3,000 to 5,000, and this number was later increased to 10,000. Subsequently, the Government decided to admit an additional number of Hungarian refugees in 1957–58 under these special arrangements.

The Commonwealth Government has granted a total of £A.130,000 for the relief of Hungarian refugees and, in addition, at present contributes the equivalent of \$100 a head to the passage costs of the refugees.

To the end of December, 1958, 13,634 Hungarian refugees had arrived in Australia.

**15. General Assisted Passage Scheme.**—To encourage the migration of persons from the United States of America, Switzerland, Denmark, Norway, Sweden and Finland, the Commonwealth Government on 10th September, 1954, introduced an assisted passage scheme for nationals of these countries. Later, the scheme was extended to cover certain British subjects living in a number of countries other than the United Kingdom. Up to 31st December, 1958, the Commonwealth made a contribution of £37 10s. sterling per adult and *pro rata* amounts for children according to the fare paid, but this was increased to £57 2s. 10d. sterling (\$160) per adult and *pro rata* for children in respect of migrants approved on and after 1st January, 1959. To the end of December, 1958, 7,100 migrants had arrived in Australia under this scheme.

**16. Summary of Arrivals of Assisted Migrants.**—The following table shows, for the period January, 1947, to December, 1958, the number of assisted migrants who arrived in Australia under the various schemes.

## NUMBER OF ARRIVALS UNDER ASSISTED PASSAGE SCHEMES.

Scheme.	1947-54.	1955.	1956.	1957.	1958.	Total, 1947-58.
<b>1. BRITISH—</b>						
United Kingdom						
Personal and Group						
Nominees .. ..	172,706	18,219	16,978	18,276	22,583	248,762
Commonwealth						
Nominees .. ..	34,344	7,389	7,082	6,665	9,338	64,818
Others .. ..	2,254	89	76	61	66	2,546
<i>Total United Kingdom</i>	209,304	25,697	24,136	25,002	31,987	316,126
Maltese .. ..	17,889	3,495	1,080	467	840	23,771
Others .. ..	2,604	513	326	294	224	3,961
<i>Total British</i>	229,797	29,705	25,542	25,763	33,051	343,858
<b>2. DUTCH—</b>						
Commonwealth Nominees	12,908	6,417	8,721	5,776	5,787	39,609
Others .. ..	1,486	924	1,083	645	411	4,549
<i>Total Dutch</i>	14,394	7,341	9,804	6,421	6,198	44,158
<b>3. GERMAN—</b>						
Commonwealth Nominees	18,512	7,751	4,116	3,817	4,417	38,613
Others .. ..	1,220	575	420	660	350	3,225
<i>Total German</i>	19,732	8,326	4,536	4,477	4,767	41,838
<b>4. AUSTRIAN—</b>						
Commonwealth Nominees	1,717	4,523	3,286	1,547	1,049	12,122
Others .. ..	73	85	69	65	39	331
<i>Total Austrian</i>	1,790	4,608	3,355	1,612	1,088	12,453
<b>5. GENERAL ASSISTED PASSAGE SCHEME(a)</b>	19	399	1,814	2,182	2,686	7,100
<b>6. REFUGEES—</b>						
Displaced Persons	170,700	..	..	..	..	170,700
Hungarians(b)	..	..	331	11,751	1,552	13,634
Ex-Austria(c)	..	19	581	1,816	1,448	3,864
Ex-Italy(c)	..	272	121	783	917	2,093
<i>Total Refugees</i>	170,700	291	1,033	14,350	3,917	190,291
<b>7. ALLIED EX-SERVICEMEN(d)</b>	20,443	890	..	..	..	21,333
<b>8. POLES FROM UNITED KINGDOM</b>	1,457	..	..	..	..	1,457
<b>9. ITALIANS—</b>						
Commonwealth Nominees	9,970	7,389	4,388	3,454	1,197	26,398
Others .. ..	409	848	1,397	1,249	939	4,842
Triestinians .. ..	4,273	472	..	..	..	4,745
<i>Total Italians</i>	14,652	8,709	5,785	4,703	2,136	35,985
<b>10. GREEK—</b>						
Commonwealth Nominees	8,706	6,247	1,545	1,080	167	17,745
Others .. ..	58	172	1,543	1,773	1,630	5,176
<i>Total Greek</i>	8,764	6,419	3,088	2,853	1,797	22,921
<b>11. SPANISH</b>	..	..	..	..	159	159
<i>Total Assisted</i>	481,748	66,688	54,957	62,361	55,799	721,553

(a) General Assisted Passage Scheme, mainly Swiss, Danish, Swedish, Norwegian, Finnish, French and U.S. Americans. (b) Hungarians from all countries of refuge, Austria, Italy, Switzerland, &c. (c) Mostly Yugoslavs and Stateless. (d) Mostly Dutch.

NOTE.—(i) All arrivals indicated in this table have obtained some financial assistance from the Australian Government towards payment of their passage money. Transport to Australia for the migrants concerned has been arranged on (1) ships under charter to the Department of Immigration, (2) ships and aircraft under charter to the Intergovernmental Committee for European Migration and (3) normal commercial shipping and airlines.

(ii) The arrivals under these schemes include a small number of nationals of other countries and stateless persons.

From the earliest years of assisted migration to the end of 1958 a total of 1,844,066 assisted migrants arrived in Australia.

## § 10. The Regulation of Immigration into Australia.

**1. Powers and Legislation of the Commonwealth.**—(i) *Constitutional.* Under section 51 (xxvii.) and (xxviii.) of the Commonwealth Constitution, the Parliament of the Commonwealth is empowered to make laws with respect to immigration, emigration, aliens, and the influx of criminals.

(ii) *Legislation.* Immigration into the Commonwealth is regulated by the Immigration Act 1901-1949, which specifies the persons whose immigration is prohibited and provides for their deportation if they enter contrary to the Act. Provision is also made for the deportation of persons who have entered lawfully but who contravene the provisions of the Act after they have entered. Power is given to the Minister for Immigration to admit prohibited immigrants for a specified period under Certificate of Exemption from the provisions of the Act relating to entry or stay in the Commonwealth.

The Aliens Deportation Act 1948 empowers the Minister for Immigration to order the deportation of an alien who after investigation by a Commissioner is reported as not being a fit and proper person to be allowed to remain in Australia.

The Migration Act 1958 comprehensively revises immigration controls and deportation procedures and is to come into force on a date to be proclaimed.

The Immigration (Guardianship of Children) Act 1946–1952 provides that the Minister for Immigration becomes the legal guardian of every person under the age of 21 years who enters Australia other than in the charge of, or for the purpose of living in the care of, a parent or adult relative. It is primarily administered through the child welfare authorities in each State who, as the Minister's delegates under the Act, supervise the welfare of each "immigrant child".

The Aliens Act 1947–1952 provides that a register of aliens shall be maintained for every State and Territory of the Commonwealth. Unless exempted, aliens 16 years of age and over are required to register with the Department of Immigration, and to notify the Department of any change of address, occupation or employment, and of their marriage. The Act also provides that consent must be obtained before an alien may change his surname.

**2. Conditions of Immigration into Australia.**—(i) *Persons of Non-European Race.* In pursuance of established policy, the general practice is not to permit Asians or other persons of non-European descent to enter Australia for the purpose of settling permanently. Special provision exists for the temporary admission of non-Europeans who are bona fide merchants, students or tourists. They are permitted to enter and remain in Australia under exemption while they retain their status. Permission may also be given for the entry of non-Europeans as assistants to employers in Asian businesses located in Australia. Such persons are allowed to remain so long as they retain their status.

(ii) *Persons of European Race.* Persons of European race desiring to settle permanently in Australia are required to obtain authority for admission from the Department of Immigration or an Australian Oversea Post. Their admission under the present policy is subject to their compliance with the Commonwealth's requirements in regard to health, character, freedom from security risk and general suitability as settlers.

(iii) *General Information.* General information as to conditions of entry into Australia may be obtained from the following officers:—

- (a) In Australia—The Secretary, Department of Immigration, Canberra, Australian Capital Territory, and Commonwealth Migration Officers in the capital cities of the various States;
- (b) In Great Britain—the Chief Migration Officer, High Commissioner's Office, Australia House, Strand, London;
- (c) In other British Commonwealth countries—The High Commissioner for Australia;
- (d) In Holland, Italy, Germany, Greece, Austria, Denmark and Hong Kong—the Chief Migration Officer or Migration Officer in the capital city of each of those countries;
- (e) In other countries where Australia is represented—the Secretary, Australian Embassy, Legation or Consulate.

For details of Australian representatives in the British Commonwealth and other countries see the section entitled "Australian Representation Abroad: Oversea Representation in Australia" in Chapter XXX.

**3. Nationality of Persons Arriving.**—For details of the nationality of persons who arrived in Australia during the years 1956 to 1958, see page 313.

## § 11. Passports.

Under the Passports Act 1920, it was compulsory for each person over 16 years of age leaving Australia to be in possession of a passport or other document authorizing his departure. This Act has now been superseded by the Passports Act 1938–1948, which repealed the compulsory provisions. The Act also applies to the External Territories of Australia.

Although it is not compulsory for Australians to obtain a passport when leaving Australia, it is desirable in their own interests that they should have one in order to establish their identity and nationality overseas. A passport is necessary for admission into most countries, and the holder of an Australian passport also has no difficulty in landing on return to Australia. The charge for an Australian passport is £1.

As a result of the Nationality and Citizenship Act 1948–1958 (see § 12 below) and the enactment of similar citizenship legislation in other British Commonwealth countries, it is now the general rule that Australian passports are issued only to Australian citizens. Citizens of other British Commonwealth countries secure passports from their own High Commissioners in Australia. Australian citizens abroad may secure passports only from Australian representatives.

Diplomatic and official passports are issued to members of the Australian diplomatic service and other Government officials proceeding abroad on official business.

Applicants for passports are required to produce evidence of their identity and nationality (e.g., birth certificates).

### § 12. Citizenship and Naturalization.

1. **Commonwealth Legislation.**—The Nationality and Citizenship Act 1948 commenced on Australia Day (26th January), 1949 and repealed all previous Commonwealth legislation on this subject. The most significant effect of the Act was the creation for the first time of the status of "Australian Citizen". In this respect, the Act was complementary to citizenship legislation passed or about to be passed by other countries of the British Commonwealth. All Australian citizens, and the citizens of other countries of the British Commonwealth, are declared to be British subjects. For details of the Act, see Official Year Book No. 42, page 619.

2. **Certificates Granted.**—(i) *Australia.* The following tables show the number of certificates granted during 1957 and the number of persons affected by these certificates. The certificate covers the person being naturalized and his/her children under the Nationality and Citizenship Act 1948–1955.

#### NATURALIZATION : CERTIFICATES GRANTED, AUSTRALIA, 1957. PREVIOUS NATIONALITIES OF RECIPIENTS.

Nationality.	Certificates Granted.	Persons Affected by Certificates.	Nationality.	Certificates Granted.	Persons Affected by Certificates.	Nationality.	Certificates Granted.	Persons Affected by Certificates.
Afghan ..	1	1	Filippino ..	2	2	Luxembourgeois ..	1	1
Albanian ..	71	76	Finnish ..	32	39	Norwegian ..	68	70
American (U.S.) ..	45	47	French ..	122	137	Polish ..	5,884	7,317
Argentinian ..	4	4	German ..	1,384	1,551	Portuguese ..	15	19
Austrian ..	304	332	Greek ..	1,059	1,253	Romanian ..	297	344
Belgian ..	23	25	Hungarian ..	2,272	2,699	Russian ..	677	810
British Protected Person ..	2	2	Iranian ..	4	4	Spanish ..	62	64
Bulgarian ..	104	113	Iraqian ..	4	4	Swedish ..	29	29
Byelorussian ..	52	66	Israeli ..	53	61	Swiss ..	122	129
Chinese ..	70	72	Italian ..	5,246	6,853	Syrian ..	13	13
Czechoslovak ..	1,419	1,621	Japanese ..	23	25	Turkish ..	9	12
Danish ..	43	49	Jordanian ..	7	7	Ukrainian ..	2,264	2,892
Dutch ..	2,901	3,987	Korean ..	1	1	Yugoslav ..	2,647	3,203
Egyptian ..	46	58	Latvian ..	2,599	2,956	Stateless ..	1,304	1,543
Estonian ..	897	1,021	Lebanese ..	265	329			
			Lithuanian ..	1,208	1,446	<b>Total</b> ..	<b>33,655</b>	<b>41,287</b>

#### COUNTRIES IN WHICH RECIPIENTS (a) ORDINARILY RESIDED IMMEDIATELY BEFORE ENTERING AUSTRALIA OR EXTERNAL TERRITORIES.

Country.	Certificates Granted.	Country.	Certificates Granted.	Country.	Certificates Granted.	Country.	Certificates Granted.
Afghanistan ..	3	Eire ..	1	Lebanon ..	280	Sweden ..	129
Africa ..	149	Estonia ..	20	Lithuania ..	19	Switzerland ..	305
Albania ..	32	Finland ..	24	Luxemburg ..	7	Syria ..	11
Arabia ..	2	France ..	882	Malaya ..	14	Thailand ..	7
Argentina ..	16	Germany ..	15,393	Malta ..	5	Timor ..	1
Austria ..	2,190	Greece ..	818	Morocco ..	12	Turkey ..	19
Belgium ..	279	Holland ..	2,532	New Caledonia ..	16	United Kingdom ..	432
Brazil ..	9	Hungary ..	232	New Zealand ..	13	Ukraine ..	28
Bulgaria ..	8	India ..	43	Norway ..	73	U.S. of America ..	81
Burma ..	3	Indonesia ..	390	Pakistan ..	3	U.S.S.R. ..	22
Canada ..	18	Iran ..	28	Panama ..	1	Venezuela ..	5
Ceylon ..	2	Iraq ..	7	Philippines ..	125	Viet Nam ..	2
China ..	597	Israel ..	304	Poland ..	212	West Indies ..	1
Cuba ..	1	Italy ..	6,268	Portugal ..	7	Yugoslavia ..	419
Cyprus ..	17	Japan ..	35	Romania ..	30		
Czechoslovakia ..	289	Jordan ..	3	South Africa ..	19		
Denmark ..	97	Korea ..	1	South America ..	17		
Egypt ..	576	Latvia ..	40	Spain ..	31	<b>Total</b> ..	<b>33,655</b>

(a) Excludes children affected by grant of certificates.

(ii) *States.* The number of persons affected by certificates granted in 1957 in respect of residents of the various States and Territories were as follows:—New South Wales, 11,777; Victoria, 11,683; Queensland, 4,967; South Australia, 7,029; Western Australia, 4,589; Tasmania, 758; Northern Territory, 88; Australian Capital Territory, 316; External Territories, 80; Total, 41 287

### § 13. Population of External Territories.

Ordinances of the individual external territories under the control of Australia, namely; Norfolk Island, Papua, the Trust Territory of New Guinea, and the Trust Territory of Nauru, provide for a Census of the non-indigenous population to be taken by the Commonwealth Statistician on the day prescribed for the taking of a Census in the Commonwealth of Australia. The following table shows the population of each of these Territories at the Census of 30th June, 1954 and the estimated population at 30th June, 1958.

On 23rd November, 1955, the Cocos (Keeling) Islands were placed under the authority of the Commonwealth. An estimate of the population at 30th June, 1958 is included in the table below.

#### POPULATION: EXTERNAL TERRITORIES. (EXCLUDING INDIGENOUS POPULATION.)

Territory.	Census, 30th June, 1954.			Estimate, 30th June, 1958.
	Males.	Females.	Persons.	Persons.
Cocos (Keeling) Islands .. ..	..	..	..	605
Norfolk Island .. ..	478	464	942	1,033
Papua .. ..	3,867	2,446	6,313	8,555
Trust Territory of New Guinea ..	7,201	4,241	11,442	15,073
Trust Territory of Nauru .. ..	1,269	376	1,645	2,150

Particulars concerning the indigenous populations of the external territories will be found in Chapter V.—The Territories of Australia.

### § 14. The Aboriginal Population of Australia.

In Official Year Book No. 17, pages 951–61, a brief account was given of the Australian aboriginal population, its origin, its numbers as estimated from time to time, and the steps taken for its protection. On pages 914–6 of Official Year Book No. 22, particulars were shown for each of the States and Territories of Australia at successive periods, while a special article dealing with the estimated number and distribution of the native population at the date of first settlement of the white race in the continent appeared on pages 687–96 of Official Year Book No. 23.

The aboriginals are scattered over the whole of the mainland but the majority are concentrated in Western Australia, Queensland and the Northern Territory. Details of the number in each State and Territory at Census of 30th June, 1947 are shown in the following table. Full-blood aboriginals in employment or living in proximity to settlements were enumerated at the census, while estimates of the total numbers, including those living in the wild state, were furnished by the Protectors of Aboriginals. Half-caste aboriginals are included in the numbers of the population and are of course enumerated at the census. The figures shown for Queensland are exclusive of Torres Strait Islanders.

#### ABORIGINAL POPULATION, 30th JUNE, 1947.

State or Territory.	Full-blood.				Half-caste. (Enumerated at the Census.)			Total, Full- blood and Half- caste.
	In Employment or Living in Proximity to Settlements.(a)			Esti- mate of Total Num- bers.(b)	Males.	Females.	Persons.	
	Males.	Females.	Persons.					
New South Wales ..	546	407	953	(c) 953	5,498	5,109	10,607	11,560
Victoria .. ..	100	108	208	(c) 208	537	532	1,069	1,277
Queensland .. ..	3,504	2,822	6,326	9,100	3,684	3,527	7,211	16,311
South Australia ..	259	205	464	2,139	1,103	1,054	(d)2,157	(d)4,296
Western Australia ..	2,664	2,269	4,933	20,338	2,359	2,215	(d)4,574	d 24,912
Tasmania .. ..	..	..	..	..	127	87	214	214
Northern Territory ..	5,615	5,370	10,985	13,900	660	587	1,247	15,147
Aust. Cap. Territory ..	..	..	..	..	58	42	100	100
Total .. ..	12,688	11,181	23,869	46,638	14,026	13,153	27,179	73,817

(a) Enumerated at the Census. (b) Furnished by the Protectors of Aboriginals. (c) Census totals. (d) In addition to these totals, the Protectors of Aboriginals estimated that there were 826 half-caste and mixed bloods in South Australia and 1,322 in Western Australia, presumably living in the nomadic state.

According to the annual Reports of the Protectors of Aboriginals, there has been little change in the numbers of aboriginals in most States since 1947. In Western Australia, however, the estimate for the total number of full-blood and half-caste aboriginals at 30th June, 1952 was 21,051.

## CHAPTER X.

## VITAL STATISTICS.

NOTE.—1. Owing to considerations of space, the tables in this chapter contain only summaries of the principal vital statistics for Australia. They relate, in the main, to the year 1957, except for the totals of marriages, births, deaths and infant deaths, for which it has been possible to include figures for 1958. Comparisons have been restricted, in general, to the individual years 1954 to 1958 and the five-year periods 1931–35 to 1951–55, while age data have been shown in groups. Comparisons over longer periods, together with more detailed figures such as single age distributions and cross-classifications of various characteristics, will be found in the annual bulletin, *Demography*.

2. Figures for Australia throughout are exclusive of full-blood aboriginals.

### § 1. Provisions for Registration and Compilation of Statistics.

In Australia, vital statistics are compiled from information obtained from the registers of births, deaths and marriages. Each State and Territory has an independent system of registration. Provisions for the civil registration of births, deaths and marriages have been in force in Tasmania from 1839, in Western Australia from 1841, in South Australia from 1842, in Victoria from 1853 and in New South Wales and Queensland (then part of New South Wales) from 1856. Registration in the Territories is administered by the Commonwealth Government, registration in respect of the Northern Territory having been taken over from South Australia in 1911 and in respect of the Australian Capital Territory from New South Wales in 1930. The authority responsible for the registration of births, deaths and marriages occurring within his particular State or Territory is the Registrar-General or the Principal Registrar.

In the Australian Capital Territory and the Northern Territory, information concerning a birth is required to be supplied within 21 days, in South Australia in 42 days, and in all other States 60 days is allowed. In all States, however, provision has been made for the late registration of births. For the registration of a death, the period allowed is 8 days in Tasmania, 10 days in South Australia, 14 days in Western Australia, the Northern Territory and the Australian Capital Territory, 21 days in Victoria and 30 days in New South Wales and Queensland. Provision is made in all States and Territories for the celebration of marriages by ministers of religion registered for that purpose with the Registrar-General or the Principal Registrar of Births, Deaths and Marriages of the State or Territory and also by certain civil officers. In all cases the celebrant, whether minister of religion or civil officer, is required to register particulars of the parties married with the Registrar of the district in which the marriage has taken place. In Victoria, Western Australia, the Northern Territory and the Australian Capital Territory, registration of a marriage is required immediately following the ceremony, in Tasmania and South Australia within 7 days and in New South Wales and Queensland within 30 days.

For all States except Queensland and Tasmania, the registration of stillbirths is compulsory. Western Australia was the first State to introduce compulsory registration in 1908, followed by the Australian Capital Territory in 1930, New South Wales in 1935, South Australia in 1937, Northern Territory in 1949 and Victoria in 1953. No statutory provision has been made in Queensland or Tasmania for the registration of stillbirths, but provision is made in these States for voluntary registration and it appears likely that nearly all such births are notified to the Registrar-General. In this chapter, stillbirths have been excluded from all tables of births and deaths and are shown only in those specially relating to stillbirths.

While there is every indication that the registration work of the several States and the Territories is very efficiently carried out, it is clear that in those States with a large area and scattered population, failure to register births and deaths may occur in a few cases.

The data required for the compilation of vital statistics are copied from the registers of births, deaths and marriages in the Registrar-General's Office and forwarded, through the Deputy Commonwealth Statistician in each State, and direct from the Principal Registrars in the two Territories, to the Commonwealth Statistician. The compilation and publication of vital statistics for Australia is a function of the Commonwealth Statistician. The Statisticians in the various States compile and publish statistics relating to their respective States.

## § 2. Marriages.

NOTE.—See NOTE at the beginning of this chapter.

1. **Number of Marriages.**—The number of marriages registered in Australia during the year ended 31st December, 1958 was 74,001, giving a rate of 7.51 per 1,000 of the mean population for the year. A summary of the number of marriages registered in each State and Territory from 1931 to 1958 is given in the following table. Annual averages for each five-year period from 1861 to 1950 were published in Official Year Book No. 39, page 575. A graph showing the number of marriages in each year from 1860 to 1958 appears on page 333 of this issue.

## MARRIAGES.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
ANNUAL AVERAGES.									
1931-35 ..	18,742	12,773	6,950	3,967	3,328	1,638	29	53	47,480
1936-40 ..	25,295	17,784	8,982	5,726	4,399	2,187	83	85	64,541
1941-45 ..	28,506	19,450	10,563	6,517	4,668	2,097	71	109	71,981
1946-50 ..	30,162	20,453	10,666	6,581	5,205	2,529	114	181	75,891
1951-55 ..	28,483	20,007	10,171	6,290	5,232	2,539	146	234	73,102
ANNUAL TOTALS.									
1954 ..	27,503	19,404	10,027	6,190	5,204	2,512	143	246	71,229
1955 ..	27,645	20,056	10,098	6,226	5,145	2,600	151	251	72,172
1956 ..	27,313	20,137	9,934	6,277	5,080	2,601	160	278	71,780
1957 ..	28,767	20,239	10,271	6,581	4,897	2,507	178	256	73,696
1958 ..	28,554	20,649	10,255	6,505	5,038	2,475	201	324	74,001

2. **Crude Marriage Rates.**—The crude marriage rates for each State and Territory from 1931 to 1958 are given hereunder:—

## CRUDE MARRIAGE RATES.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
AVERAGE ANNUAL RATES.									
1931-35 ..	7.20	7.02	7.35	6.83	7.58	7.19	5.92	5.74	7.16
1936-40 ..	9.29	9.52	8.80	9.65	9.49	9.25	13.28	7.22	9.35
1941-45 ..	9.97	9.86	10.04	10.61	9.74	8.61	7.18	7.57	9.94
1946-50 ..	9.90	9.72	9.41	9.87	10.01	9.56	9.39	9.36	9.77
1951-55 ..	8.41	8.34	7.92	8.11	8.44	8.35	9.21	(b) 8.22	8.29
ANNUAL RATES.									
1954 ..	8.02	7.91	7.64	7.77	8.13	8.07	8.82	(b) 8.10	7.92
1955 ..	7.92	7.94	7.54	7.59	7.81	8.22	8.86	(b) 7.74	7.84
1956 ..	7.68	7.73	7.27	7.40	7.50	8.07	8.94	(b) 8.01	7.61
1957 ..	7.94	7.57	7.38	7.53	7.08	7.59	9.50	(b) 6.80	7.64
1958 ..	7.73	7.54	7.25	7.25	7.14	7.33	10.45	7.88	7.51

(a) Number of marriages per 1,000 of mean population. (b) Revised rates based on population estimates adjusted in accordance with the June, 1957 Population Count of Canberra are as follows:—1951-55, 8.20; 1954, 8.09; 1955, 7.67; 1956, 7.86; 1957, 6.74.

3. **Marriage Rates based on Marriageable Population.**—As the marriage rates in some international tabulations are based on the unmarried population aged 15 years and over, the corresponding rates have been calculated for Australia for the eight census periods to 1953-55. The period in each case comprises the census year with the year immediately preceding and the year immediately following, and the figures are as follows,

## PERSONS MARRYING PER 1,000 OF UNMARRIED POPULATION : AUSTRALIA.

Period.			Rate.(a)	Period.			Rate.(a)
1880-82	..	..	48.63	1920-22	..	..	55.97
1890-92	..	..	44.04	1932-34	..	..	42.88
1900-02	..	..	42.14	1946-48	..	..	71.24
1910-12	..	..	50.12	1953-55	..	..	65.32

(a) Average annual number of persons who married per 1,000 unmarried persons, including widowed and divorced, aged 15 years and over.

4. Crude Marriage Rates of Various Countries.—The following table gives the crude marriage rates for Australia in comparison with the rates for various other countries.

## CRUDE MARRIAGE RATES(a) : VARIOUS COUNTRIES.

Country.	1921-25.	1926-30.	1931-35.	1957.	Country.	1921-25.	1926-30.	1931-35.	1957.
United States of America	10.6	9.9	9.2	8.9	New Zealand(c)	8.0	7.6	7.3	8.0
Union of South Africa(b)	8.0	9.3	9.4	8.8	United Kingdom	7.7	7.5	7.9	7.8
Yugoslavia	10.6	9.5	7.8	8.6	Belgium	10.6	9.1	7.8	7.6
Japan	8.8	8.0	7.6	8.5	Australia(d)	8.0	7.5	7.2	7.6
Spain	7.3	7.3	6.5	8.5	Italy	9.0	7.3	6.8	7.5
Netherlands	8.2	7.7	7.2	8.5	Denmark	7.9	7.8	8.7	7.3
Switzerland	7.7	7.5	7.7	8.1	Finland	7.1	7.2	7.2	7.2
Canada	7.3	7.3	6.4	8.0	Sweden	6.3	6.7	7.3	7.0
Austria	9.6	7.5	6.8	8.0	France	9.5	8.2	7.4	7.0
					Norway	6.3	6.1	6.5	6.9
					Ireland, Republic of	4.9	4.6	4.6	5.0

(a) Number of marriages per 1,000 of mean or mid-year population.

(c) Includes Maoris.

(d) Excludes full-blood aboriginals.

(b) White population only.

5. Age and Conjugal Condition at Marriage.—(i) *General.* Particulars of age at marriage in age groups and previous conjugal condition of bridegrooms and brides in 1957 are given hereunder. There were 6,563 males under 21 years of age married during 1957, while the corresponding number of females was 26,749. At the other extreme there were 105 bachelors and 60 spinsters in the age group 65 years and over.

## AGE AND CONJUGAL CONDITION OF BRIDEGROOMS AND BRIDES : AUSTRALIA, 1957.

Age at Marriage (Years).	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
Under 20	3,073	..	..	3,073	18,084	4	5	18,093
20-24	30,630	13	50	30,693	32,849	99	240	33,188
25-29	20,056	64	435	20,555	8,582	217	963	9,762
30-34	7,288	148	893	8,329	3,003	309	1,128	4,440
35-39	2,578	178	852	3,608	1,300	379	989	2,668
40-44	1,170	319	734	2,223	684	456	692	1,832
45-49	696	315	591	1,602	407	486	472	1,365
50-54	386	406	357	1,149	270	404	210	884
55-59	203	450	218	871	145	337	81	563
60-64	83	416	84	583	87	307	54	448
65 and over	105	835	70	1,010	60	361	32	453
<b>Total</b>	<b>66,268</b>	<b>3,144</b>	<b>4,284</b>	<b>73,696</b>	<b>65,471</b>	<b>3,359</b>	<b>4,866</b>	<b>73,696</b>

(ii) *Proportional Distribution.* In the following table the proportional distribution of bridegrooms and brides according to previous conjugal condition is shown in five-year periods from 1931 to 1955 and for each of the years 1955 to 1957:—

**CONJUGAL CONDITION OF BRIDEGROOMS AND BRIDES : PROPORTIONAL DISTRIBUTION, AUSTRALIA.**  
(Per Cent.)

Period.	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
1931-35 ..	92.63	5.39	1.98	100.00	94.37	3.53	2.10	100.00
1936-40 ..	92.59	4.82	2.59	100.00	93.94	3.38	2.68	100.00
1941-45 ..	91.44	4.77	3.79	100.00	92.11	3.93	3.96	100.00
1946-50 ..	88.82	4.74	6.44	100.00	88.71	4.74	6.55	100.00
1951-55 ..	88.77	4.63	6.60	100.00	88.04	4.81	7.15	100.00
1955 ..	89.24	4.46	6.30	100.00	88.28	4.72	7.00	100.00
1956 ..	89.59	4.33	6.08	100.00	88.45	4.68	6.87	100.00
1957 ..	89.92	4.27	5.81	100.00	88.84	4.56	6.60	100.00

(iii) *Relative Ages of Bridegrooms and Brides.* The relative ages of bridegrooms and brides in 1957 are shown below in age groups of five years.

**RELATIVE AGES OF BRIDEGROOMS AND BRIDES : AUSTRALIA, 1957.**

Age of Bridegroom (Years).	Total Bridegrooms.	Age of Bride (Years).							
		Under 15.	15-19.	20-24.	25-29.	30-34.	35-39.	40-44.	45 and over.
Under 20 ..	3,073	17	2,486	550	18	1	1	..	..
20-24 ..	30,693	15	11,417	17,594	1,436	190	26	10	5
25-29 ..	20,555	2	3,449	11,474	4,364	937	238	62	29
30-34 ..	8,329	1	568	2,795	2,595	1,573	569	168	60
35-39 ..	3,608	1	93	557	896	940	695	299	127
40-44 ..	2,223	..	29	157	294	468	514	455	306
45-49 ..	1,602	..	9	42	112	201	354	373	511
50-54 ..	1,149	..	6	11	33	84	163	247	605
55-59 ..	871	..	..	7	10	29	75	125	625
60-64 ..	583	..	..	..	3	9	21	57	493
65 and over	1,010	..	..	1	1	8	12	36	952
Total Brides	73,696	36	18,057	33,188	9,762	4,440	2,668	1,832	3,713

(iv) *Average Ages of Bridegrooms and Brides.* The average age at marriage of brides has remained fairly constant during recent years at a figure of about 25½ years. The average ages, in years, of brides for each of the five years to 1957 were:—1953, 25.73; 1954, 25.59; 1955, 25.42; 1956, 25.34; and 1957, 25.18. For the following five-year periods the average ages in years were:—1931-35, 25.50; 1936-40, 25.72; 1941-45, 25.68; 1946-50, 25.61; and 1951-55, 25.61. The average ages, in years, of bridegrooms were 28.96 in 1953, 28.82 in 1954, 28.68 in 1955, 28.66 in 1956, and 28.54 in 1957. It follows, therefore, that brides are, generally speaking, a little more than three years younger than bridegrooms. The difference in age was 3.23 in 1953 and 1954, 3.26 in 1955, 3.32 in 1956, and 3.36 in 1957.

6. *Previous Conjugal Condition.*—The following table shows the relative conjugal condition of bridegrooms and brides in 1957.

## CONJUGAL CONDITION OF BRIDEGROOMS AND BRIDES: AUSTRALIA, 1957.

Conjugal Condition of Bridegrooms.	Total Bridegrooms.	Conjugal Condition of Brides.		
		Spinsters.	Widows.	Divorced.
Bachelors .. .. .	66,268	62,009	1,389	2,870
Widowers .. .. .	3,144	1,188	1,325	631
Divorced .. .. .	4,284	2,274	645	1,365
Total Brides .. .. .	73,696	65,471	3,359	4,866

7. Birthplaces of Persons Marrying.—A table showing the relative birthplaces of bridegrooms and brides married in each year will be found in the annual bulletin, *Demography*.

8. Occupation of Bridegrooms.—The distribution of the 73,696 bridegrooms for 1957 amongst classes of occupations was as follows:—craftsmen, 20,065; commercial and clerical, 13,016; operatives, 11,581; rural, fishing and hunting, 7,971; labourers, 7,944; professional and semi-professional, 4,171; domestic and protective service, 4,130; administrative, 2,761; not gainfully occupied and not stated, 2,057.

9. Celebration of Marriages.—In all the States, marriages may be celebrated either by ministers of religion who are registered for that purpose with the Registrar-General, or by certain civil officers—in most cases district registrars—but most of the marriages are celebrated by ministers of religion. The registered ministers in 1957 belonged to more than forty different denominations, some of which, however, have only very few adherents. A number of these have been combined under the heading "Other Christian". The figures for 1957 are shown in the following table:—

## MARRIAGES IN EACH DENOMINATION, 1957.

Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia.	
									No.	Proportion of Total.
Church of England .. .. .	9,417	4,885	2,836	1,297	1,456	907	34	77	20,909	28.37
Roman Catholic .. .. .	7,283	5,331	2,649	1,171	1,143	482	50	93	18,202	24.70
Methodist .. .. .	2,735	2,447	1,674	1,566	588	393	9	12	9,424	12.79
Presbyterian .. .. .	3,113	3,308	1,845	346	355	135	17	27	9,146	12.41
Greek Orthodox .. .. .	692	962	95	338	50	4	..	5	2,146	2.91
Baptist .. .. .	367	280	161	161	77	78	..	..	1,124	1.53
Lutheran .. .. .	137	237	281	391	27	6	1	6	1,086	1.47
Congregational .. .. .	245	252	73	227	99	42	2	..	940	1.28
Church of Christ .. .. .	89	355	53	142	87	19	1	2	748	1.01
Salvation Army .. .. .	102	102	130	46	23	17	4	1	425	0.58
Seventh-Day Adventist .. .. .	86	29	42	22	18	14	..	..	211	0.29
Unitarian .. .. .	..	30	..	..	1	..	..	..	31	0.04
Other Christian .. .. .	168	175	145	37	142	25	22	1	715	0.97
Hebrew .. .. .	142	183	1	1	7	6	..	..	340	0.46
Other Non-Christian .. .. .	..	..	..	2	..	..	..	..	2	..
Total .. .. .	24,576	18,576	9,985	5,747	4,073	2,128	140	224	65,449	88.81
Civil Officers .. .. .	4,191	1,663	286	834	824	379	38	32	8,247	11.19
Grand Total .. .. .	28,767	20,239	10,271	6,581	4,897	2,507	178	256	73,696	100.00

## PROPORTION OF TOTAL.

(Per cent.)

Denominational .. .. .	85.43	91.78	97.22	87.33	83.17	84.88	78.65	87.50	88.81
Civil .. .. .	14.57	8.22	2.78	12.67	16.83	15.12	21.35	12.50	11.19

## § 3. Divorce.

The number of dissolutions of marriage, nullities of marriage and judicial separations in 1957 was 6,374. Further information may be found in Chapter XVI.—Public Justice, and detailed tables relating to divorce statistics for 1957 and summary tables for earlier years in *Demography*, Bulletin No. 75.

## § 4. Fertility and Reproduction.

NOTE.—See NOTE at the beginning of this chapter.

1. **Introductory.**—Of the two elements of increase in the population, namely, natural increase and net migration, the former has been by far the more important over the past few decades. The level of natural increase depends on the excess of births over deaths and the relation between fertility and mortality determines the rate of reproduction or replacement of the population.

2. **Number of Live Births and Confinements.**—(i) *Year 1957.* There are various methods of measuring the fertility of the population by relating the number of births to the numbers in the population. In each the basic data are, of course, the numbers of live births.

The number of live births registered in Australia during 1957 is shown in the following table. The table shows also the number of confinements resulting in one or more live births. The figures exclude cases where the births were of still-born children only.

## LIVE BIRTHS AND CONFINEMENTS, 1957.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	N.T.	A.C.T.	Australia.
LIVE BIRTHS.									
Single births ..	77,615	59,052	33,078	19,083	16,533	8,268	628	1,113	215,370
Twins ..	1,801	1,382	668	453	388	167	18	21	4,898
Triplets ..	40	30	17	..	3	..	..	..	90
Quadruplets ..	..	..	..	..	..	..	..	..	..
Males ..	40,879	30,968	17,329	10,025	8,738	4,365	337	596	113,237
Females ..	38,577	29,496	16,434	9,511	8,186	4,070	309	538	107,121
<b>Total ..</b>	<b>79,456</b>	<b>60,464</b>	<b>33,763</b>	<b>19,536</b>	<b>16,924</b>	<b>8,435</b>	<b>646</b>	<b>1,134</b>	<b>220,358</b>

## STILLBIRTHS ASSOCIATED WITH MULTIPLE BIRTHS INCLUDED ABOVE.

Twins ..	53	8	10	5	10	5	..	1	92
Triplets ..	2	..	1	..	..	..	..	..	3

## CONFINEMENTS RESULTING IN ABOVE BIRTHS.

Nuptial ..	75,153	57,718	31,491	18,670	15,943	8,011	551	1,102	208,639
Ex-nuptial ..	3,403	2,039	1,932	642	790	343	86	22	9,257
<b>Total ..</b>	<b>78,556</b>	<b>59,757</b>	<b>33,423</b>	<b>19,312</b>	<b>16,733</b>	<b>8,354</b>	<b>637</b>	<b>1,124</b>	<b>217,896</b>

NOTE.—Owing to the registration procedure adopted in some States, it is possible that in some cases where one child only of a multiple pregnancy is live-born the confinement has been treated as a single birth. However, the numbers of multiple births are not significantly affected. See also para. 13.

(ii) *Live Births, Years 1931 to 1958.* The average annual number of live births in each State and Territory for each five-year period from 1931 to 1955 and the total number of live births for each year from 1954 to 1958 are given in the following table. Corresponding figures for each five-year period from 1861 to 1950 were published in Official Year Book No. 39, page 583.

LIVE BIRTHS.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
ANNUAL AVERAGES.									
1931-35 ..	44,964	28,380	17,480	8,646	8,061	4,547	79	145	112,302
1936-40 ..	47,679	30,282	19,534	9,388	8,877	4,866	125	221	120,972
1941-45 ..	56,583	38,002	23,431	12,546	10,409	5,418	113	384	146,886
1946-50 ..	68,856	47,372	28,003	16,270	13,130	7,064	289	734	181,718
1951-55 ..	73,737	53,770	30,983	18,045	15,724	7,774	468	922	201,423
ANNUAL TOTALS.									
1954 ..	73,125	54,660	31,176	18,227	15,928	7,770	513	857	202,256
1955 ..	74,407	56,336	32,352	18,494	16,623	8,089	515	861	207,677
1956 ..	75,714	58,393	32,409	18,964	16,916	8,104	556	1,077	212,133
1957 ..	79,456	60,464	33,763	19,536	16,924	8,435	646	1,134	220,358
1958 ..	80,045	61,269	33,872	20,047	16,731	8,568	697	1,275	222,504

A graph showing the number of births in each year from 1860 to 1958 will be found on page 333.

3. Crude Birth Rates.—The oldest and most popular method of measuring fertility is to relate the number of births to the total population, thus obtaining the crude birth rate. The crude birth rate measures the rate per thousand persons (irrespective of age or sex) at which the population has added to its numbers by way of births during a given period. Other methods of measuring fertility are shown on pages 330-337.

Crude birth rates for each five-year period from 1931 to 1955 and for each year from 1954 to 1958 for each State and Territory are set out below:—

CRUDE BIRTH RATES.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
AVERAGE ANNUAL RATES.									
1931-35 ..	17. 28	15. 60	18. 48	14. 89	18. 36	19. 95	15. 99	15. 77	16. 94
1936-40 ..	17. 51	16. 20	19. 48	15. 82	19. 16	20. 58	19. 96	18. 68	17. 52
1941-45 ..	19. 79	19. 27	22. 28	20. 43	21. 72	22. 23	11. 40	26. 82	20. 28
1946-50 ..	22. 60	22. 51	24. 69	24. 41	25. 24	26. 71	23. 77	37. 92	23. 39
1951-55 ..	21. 78	22. 41	24. 13	23. 25	25. 35	25. 57	29. 64	32. 30	22. 85

ANNUAL RATES.

1954 ..	21. 33	22. 28	23. 74	22. 89	24. 88	24. 97	31. 64	32. 21	22. 50
1955 ..	21. 31	22. 30	24. 16	22. 55	25. 23	25. 59	30. 22	32. 56	22. 57
1956 ..	21. 29	22. 42	23. 72	22. 35	24. 98	25. 15	31. 07	33. 04	22. 50
1957 ..	21. 93	22. 61	24. 25	22. 35	24. 47	25. 55	34. 49	33. 13	22. 86
1958 ..	21. 67	22. 36	23. 95	22. 35	23. 71	25. 37	36. 25	31. 01	22. 59

(a) Number of births per 1,000 of mean population. (b) Revised rates based on population estimates adjusted in accordance with the June, 1957 Population Count of Canberra are as follows:—1951-55, 32.22; 1954, 28.17; 1955, 26.30; 1956, 30.47; 1957, 29.84.

NOTE.—The birth rates in the table above are based on live births registered in the respective States and Territories. Prior to 1939, a large proportion of births in respect of which the mother's usual residence was the Australian Capital Territory took place in Queanbeyan, just over the New South Wales border. With improved hospital facilities in the Territory, the position was reversed until late in 1952, when maternity accommodation was provided at the Queanbeyan District Hospital. The following rates, based on births in respect of which the mother's usual residence was the Australian Capital Territory, are a truer measure of birth rates in the Australian Capital Territory.

Average Annual Rates.			Annual Rates.		
1931-1935 ..	..	19. 53	1954 ..	..	(a)28. 67
1936-1940 ..	..	19. 29	1955 ..	..	(a)26. 53
1941-1945 ..	..	23. 06	1956 ..	..	(a)30. 64
1946-1950 ..	..	27. 13	1957 ..	..	(a)29. 58
1951-1955 ..	..	(a)28. 39	1958 ..	..	31. 04

(a) Revised rates based on population estimates adjusted in accordance with the June, 1957 Population Count of Canberra are as follows:—1951-55, 28.32; 1954, 28.63; 1955, 26.27; 1956, 30.07; 1957, 29.29.

The variations similarly caused in the birth rates for the States and the Northern Territory by referring the birth registrations to the State or Territory in which the mother was usually resident are shown by the following corrected rates for 1958:—New South Wales, 21.65; Victoria, 22.36; Queensland, 24.02; South Australia, 22.29; Western Australia, 23.74; Tasmania, 25.46; and Northern Territory, 36.15.

A graph showing the birth rate for each year from 1860 to 1958 will be found on page 334.

In the earlier years of the present century the crude birth rate fluctuated somewhat, but from 1912, when 28.60 was recorded, there was an almost continuous decline to the very low figure of 16.39 in 1934. The decline in the depression years was occasioned to some extent by the postponement of marriages and, with subsequent improvement in economic conditions, the rate rose. From 1940 the rate increased quite appreciably, owing to a continued improvement in the economic welfare of the community and the war-time boom in marriages. The latter resulted in an abnormal number of first births, but investigation indicates that rates for births other than first were generally slightly higher than might have been expected from pre-war experience. The improvement in the birth rate has been substantially maintained since the end of the war despite some falling off in marriage rates. The post-war peak of 24.07 was recorded in 1947.

4. **Crude Birth Rates, Various Countries.**—The following table gives crude birth rates for Australia in comparison with rates for various other countries.

**CRUDE BIRTH RATES(a) : VARIOUS COUNTRIES.**

Country.	1921- 25.	1926- 30.	1931- 35.	1957.	Country.	1921- 25.	1926- 30.	1931- 35.	1957.
Canada .. .. .	27.4	24.1	21.4	28.2	Finland .. .. .	24.7	22.5	19.5	20.1
Union of South Africa(b) .. ..	27.1	25.9	24.1	25.6	France .. .. .	19.3	18.2	16.5	18.4
New Zealand(c) ..	22.2	19.7	17.0	25.1	Norway .. .. .	22.2	18.0	15.2	18.2
United States of America .. .. .	22.5	19.7	16.9	25.0	Italy .. .. .	29.8	26.8	23.8	18.2
Yugoslavia .. ..	35.0	34.2	31.8	23.5	Switzerland ..	19.5	17.6	16.4	17.7
Australia(e) .. .	23.9	21.0	16.9	22.9	Japan .. .. .	34.6	33.5	31.6	17.2
Spain .. .. .	29.8	28.5	27.1	21.7	Belgium .. .. .	20.4	18.6	16.8	17.0
Netherlands .. .	25.7	23.2	21.2	21.2	Austria .. .. .	22.2	17.6	14.4	17.0
Ireland, Republic of	20.3	20.1	19.4	21.2	Denmark .. .. .	22.3	19.4	17.7	16.7
					United Kingdom	20.4	17.2	15.5	16.5
					Sweden .. .. .	19.1	15.9	14.1	14.6

(a) Number of births per 1,000 of mean or mid-year population. (b) White population only.  
(c) Excludes Maoris. (d) 1933-35. (e) Excludes full-blood aboriginals.

5. **Fertility Rates.**—The principal demographic factors affecting the level of crude birth rates are the proportion of women of child-bearing age in the population and the proportion of such women who are married. These factors may vary considerably at different periods and for different countries, and a population with a higher proportion of married women of child-bearing age will have a much higher crude birth rate than one with a low proportion, although the fertilities of the two populations may be identical.

In order to compare fertilities, births are sometimes related to the number of women of child-bearing age or, alternatively, nuptial births are related to the number of married women of child-bearing age. Thus births are related to potential mothers, giving the fertility rate.

The following table sets out for certain periods, commencing with 1880-82, the number of births per thousand of mean population, the number of births per thousand women of child-bearing age and the number of nuptial births per thousand married women of child-bearing age. For purposes of this table the child-bearing age has been taken to be 15-44 years inclusive, but births to mothers who were stated to be under 15 or over 44 years have been included in the compilations.

## CRUDE BIRTH RATES AND FERTILITY RATES: AUSTRALIA.

Period.	Average Annual Rates.			Index Nos. (Base: 1880-82 = 100).		
	Crude Birth Rate.(a)	Fertility Rates.		Crude Birth Rate.(a)	Fertility Rates.	
		Births per 1,000 Women aged 15-44 Years.	Nuptial Births per 1,000 Married Women aged 15-44 Years.		Births per 1,000 Women aged 15-44 Years.	Nuptial Births per 1,000 Married Women aged 15-44 Years.
1880-82 ..	35.3	170	321	100	100	100
1890-92 ..	34.5	159	332	98	94	103
1900-02 ..	27.2	117	235	77	69	73
1910-12 ..	27.2	117	236	77	69	74
1920-22 ..	25.0	107	197	71	63	61
1932-34 ..	16.7	71	131	47	42	41
1946-48 ..	23.6	104	160	67	61	50
1953-55 ..	22.7	109	149	64	64	46

(a) Number of births per 1,000 of mean population.

The table above shows how increasing proportions both of women of child-bearing age and of married women of child-bearing age inflate the crude birth rate. Thus, while the nuptial birth rate for married women increased by only 22 per cent. over the period 1932-34 to 1946-48 the crude birth rate rose by 41 per cent., due principally to the greatly increased number of marriages during that period.

6. **Age-specific Fertility Rates for Females.**—So long as customary ages at marriage do not change drastically, the main demographic factor affecting the number of births is the age composition of the potential mothers in the population. Within the child-bearing group the fertility of women of different ages varies considerably and a clearer view of the fertility of the population can be obtained from an examination of what are known as its age-specific fertility rates, that is, the number of births to women of specified ages per thousand women of those particular ages.

Age-specific fertility rates are more commonly expressed in age groups than in single ages. In the following table, such rates, calculated in terms of female births for the purpose of obtaining the gross and net reproduction rates described in para. 7, are shown in five-year age groups for Australia for the period 1921 to 1957.

## AGE-SPECIFIC FERTILITY RATES(a): AUSTRALIA.

Age Group (Years).	1921.	1926.	1931.	1936.	1941.	1946.	1951.	1955.	1956.	1957.
15-19 ..	12.83	14.02	13.08	12.18	11.90	12.63	18.59	20.30	20.84	21.26
20-24 ..	65.45	60.23	53.08	50.33	59.42	73.52	85.84	99.48	101.46	104.24
25-29 ..	82.24	76.82	62.47	62.02	70.78	89.51	90.24	97.12	98.11	102.53
30-34 ..	68.50	61.90	51.25	46.33	49.72	65.03	59.16	60.14	59.65	62.35
35-39 ..	49.48	43.55	33.23	28.89	28.69	37.43	32.29	31.12	31.32	31.61
40-44 ..	21.66	17.63	13.61	10.19	9.52	11.87	9.97	9.92	9.48	9.73
45-49 ..	2.10	1.90	1.45	1.11	0.80	1.03	0.80	0.71	0.76	0.64

(a) Number of female births per 1,000 women in each age group.

The table shows that in recent years the most fertile age group has been 20-24 years, whereas previously fertility had been highest for the 25-29 age group. The decline in fertility between 1921 and 1936 was general but was more pronounced in the higher age groups. During the period 1936 to 1957, a rise in fertility occurred in all age groups below 40. The most noticeable increase has been in the 20-24 age group, in which, as mentioned, fertility is now highest, as the result of a marked trend towards earlier marriage.

7. **Gross and Net Reproduction Rates for Females.**—A single measure of reproduction known as the gross reproduction rate is obtained by adding together the specific fertility rates for each age in the child-bearing group. This measure indicates the number of female children who would be born on the average to women living right through the child-bearing period, if the conditions on which the rate is based continue. The rate is unaffected by the age composition of the potential mothers, and consequently it shows more clearly than the crude birth rate the reproductive propensity of the population. It is, however, an

imperfect measure of reproduction because it does not take into account the females who fail to live from birth to the end of the reproductive period. A more accurate measure of this nature is obtained by multiplying the specific fertility rates by the number of females in the corresponding age group of the stationary or life table population and summing the products. Allowance is thus made for the effect of mortality and the result is known as the net reproduction rate. The net reproduction rate indicates the average number of female children who would be born to women during their lifetime if they were subject at each age to the fertility and mortality rates on which the calculation is based. A constant net reproduction rate of unity indicates that the population will ultimately become stationary. If it continues greater than unity, the population will ultimately increase; if less than unity, it will ultimately decrease. The following table should be read in the light of the comment which follows it and of the index of marriage fertility in paragraph 9, page 337.

## GROSS AND NET REPRODUCTION RATES: AUSTRALIA.

Year.	Gross Reproduction Rate.	Net Reproduction Rate.	Year.	Gross Reproduction Rate.	Net Reproduction Rate.
1881(a) .. ..	2.65	(b) 1.88	1947 .. ..	1.493	(g) 1.416
1891(a) .. ..	2.30	(b) 1.73	1951 .. ..	1.485	(g) 1.409
1901(a) .. ..	1.74	(c) 1.39	1953 .. ..	1.556	(g) 1.477
1911 .. ..	1.705	(d) 1.421	1954 .. ..	1.558	(h) 1.497
1921 .. ..	1.511	(e) 1.313	1955 .. ..	1.594	(h) 1.532
1931 .. ..	1.141	(f) 1.039	1956 .. ..	1.608	(h) 1.546
1941 .. ..	1.154	(f) 1.053	1957 .. ..	1.662	(h) 1.598

(a) Approximate only. (b) 1881-1890 mortality experience used. (c) 1891-1900 mortality experience used. (d) 1901-1910 mortality experience used. (e) 1920-1922 mortality experience used. (f) 1932-1934 mortality experience used. (g) 1946-1948 mortality experience used. (h) 1953-1955 mortality experience used.

NOTE.—It is not strictly correct to assume, as in the calculations of the rates above, that a particular age-specific fertility rate can be applied to a hypothetical group of women reaching that age, without taking account of previous fertility and marriage experiences. Reproduction rates are therefore unreliable when birth and marriage rates have been changing. The indexes of marriage fertility shown on the next page are also of doubtful reliability in similar circumstances.

Since 1881, there has been a substantial downward trend in both rates, but the gross rate has fallen considerably more than the net, showing that the decline in fertility has been offset to some extent by a decline in mortality. The net reproduction rate was below unity over the period 1932 to 1939. If such low levels were to be experienced indefinitely, ultimate population decline would be certain. The progressive rise in both gross and net reproduction rates from 1939 to 1947 was due largely to higher marriage rates during the war and early post-war years than had been experienced in the immediate pre-war years. Such fluctuations in marriage rates affect both gross and net reproduction rates substantially. When fluctuations in marriage rates are transient, reproduction rates calculated as above are not valid as indicators of relative fertility nor of the extent to which population will replace itself. Owing to various influences, the number of marriages in each year since 1950 has remained at a relatively high level and the net reproduction rates have been steady at about 1.4 to 1.5. The fertility of marriages is shown in paragraph 9 below.

8. Gross and Net Reproduction Rates, Various Countries.—In the following table a comparison is given of the gross and net reproduction rates recorded for various countries in the period 1955 to 1957. These represent the latest available international comparison.

## GROSS AND NET REPRODUCTION RATES: VARIOUS COUNTRIES.

Country.	Period.	Reproduction Rate.		Country.	Period.	Reproduction Rate.	
		Gross.	Net.			Gross.	Net.
Canada .. ..	1956	1.88	(a)	France .. ..	1956	1.30	1.24
New Zealand(b) ..	1956	1.85	1.78	Norway .. ..	1955	1.33	1.26
United States of America(c) ..	1955	1.67	1.61	Switzerland ..	1955	1.19	1.13
Australia(d) ..	1957	1.66	1.60	Denmark .. ..	1956	1.26	1.14
Ireland, Republic of	1955	1.59	1.45	Scotland .. ..	1957	1.33	1.27
Netherlands .. ..	1956	1.48	1.41	England and Wales	1956	1.15	1.11
Finland .. ..	1955	1.42	1.34	Belgium .. ..	1955	1.16	1.06
Portugal .. ..	1955	1.40	1.20	Sweden .. ..	1955	1.09	1.06

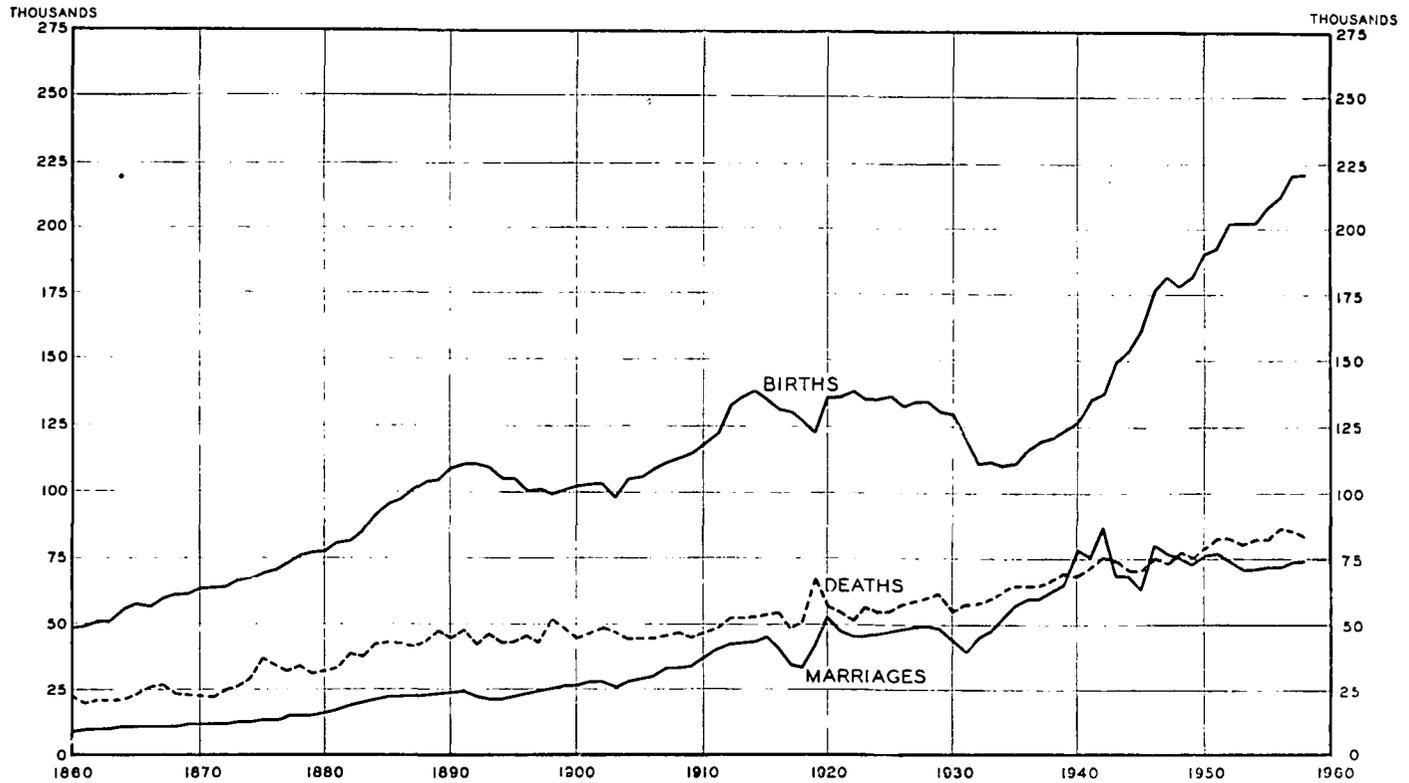
(a) Not available. full-blood aborigines.

(b) Excludes Maoris.

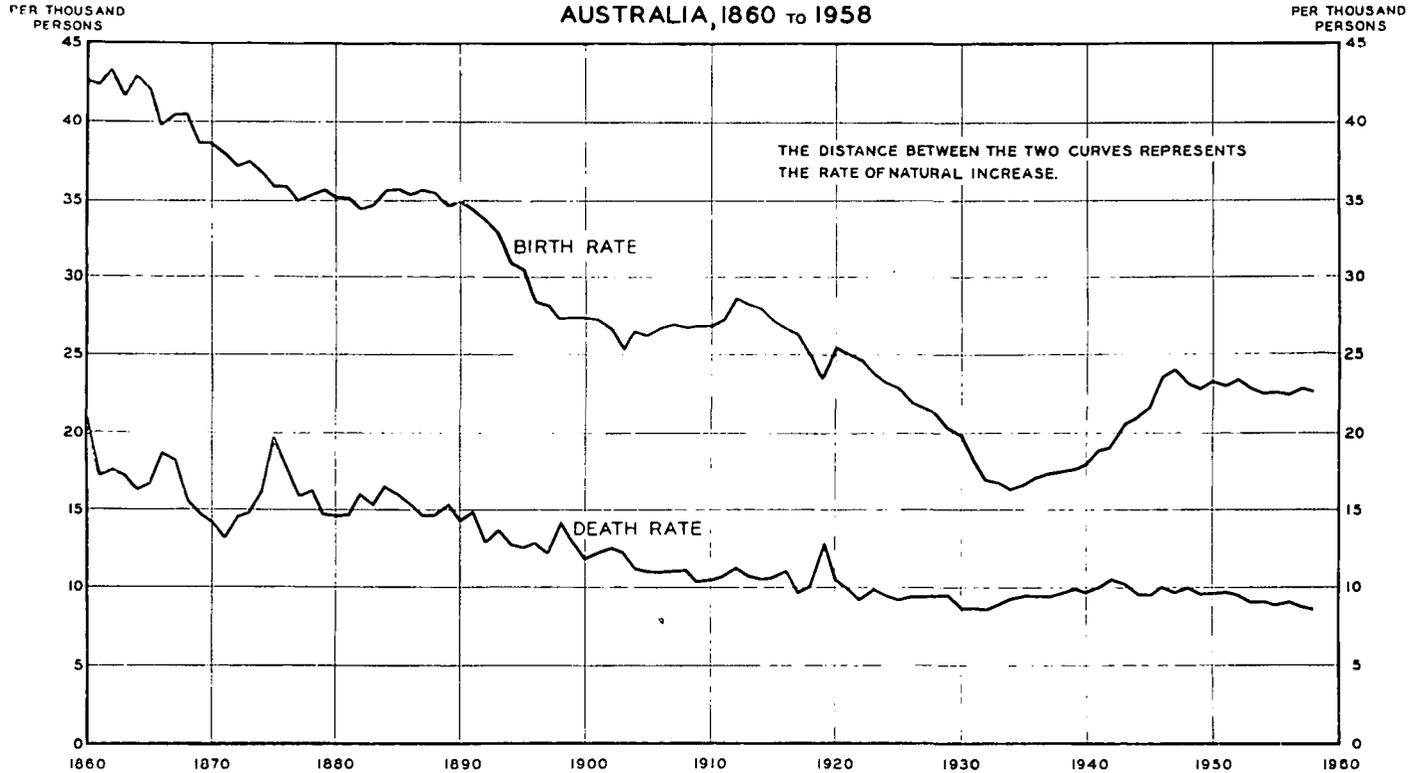
(c) White population only.

(d) Excludes

# BIRTHS, DEATHS, AND MARRIAGES: AUSTRALIA, 1860 to 1958

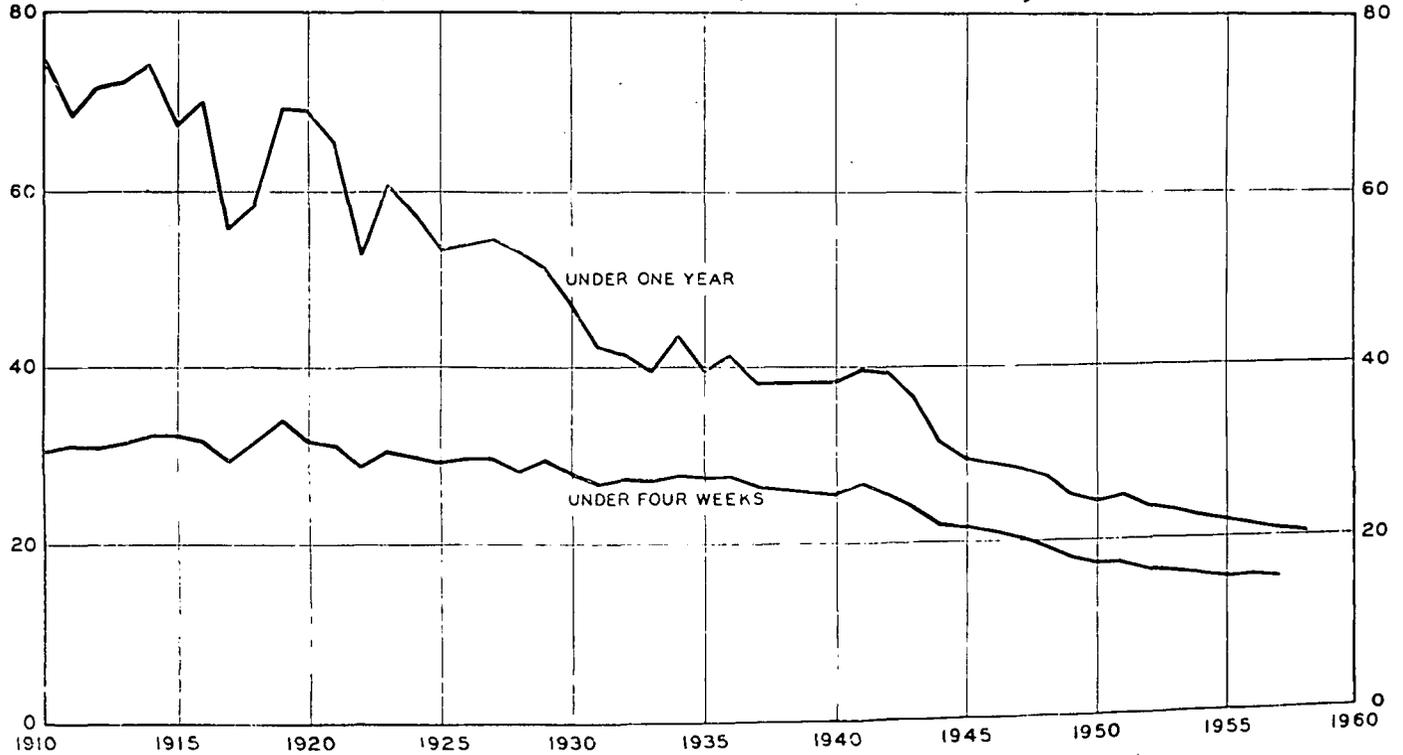


# RATES OF BIRTHS, DEATHS, AND NATURAL INCREASE



# INFANT MORTALITY RATES: AUSTRALIA, 1910 TO 1958

(INFANT DEATHS PER 1,000 LIVE BIRTHS)





In comparing the reproduction rates of the countries shown above, allowance should be made for any differences in years, as the rates for any one country from year to year are affected by variations in the incidence of marriage.

9. **Fertility of Marriages.**—Estimates of the fertility of marriages which were published in issues of the Official Year Book prior to No. 36 were calculated by relating the births of one five-year period to the marriages in the preceding five years (*see* Official Year Book No. 35, p. 329). Since the publication of that issue, an improved method has been formulated for measuring current marriage fertility by relating nuptial confinements in each year to the marriages from which they could have resulted. Confinements of women of a certain number of years duration of marriage are related to the number of marriages taking place that number of years previously. The table below sets out this index of current fertility per marriage in respect of confinements in the individual years shown.

#### FERTILITY OF MARRIAGES: AUSTRALIA.

Year.	Nuptial Confinements per Marriage.	Year.	Nuptial Confinements per Marriage.	Year.	Nuptial Confinements per Marriage.
1943..	2.21	1948..	2.44	1953..	2.66
1944..	2.28	1949..	2.45	1954..	2.66
1945..	2.36	1950..	2.56	1955..	2.71
1946..	2.55	1951..	2.55	1956..	2.76
1947..	2.55	1952..	2.63	1957..	2.87

NOTE.—See NOTE to table on page 332.

The figure for a particular year gives the estimated number of children which a marriage would produce according to the fertility conditions of that year. There was an almost continuous decline for a number of years to 1942, but a pronounced increase has since occurred. In comparing this index with the net reproduction rate, it is evident that the rise in the latter since 1935 has been caused mainly by a rise in the marriage rate, due firstly to postponed depression marriages, and secondly to war-time and post-war marriages which have resulted in very high proportions of women married, particularly in the most fertile age groups. Only since 1944 has there been an increase in the fertility of marriages compared with pre-war levels.

The figures for 1949 and subsequent years present a somewhat inflated index, as many of the births which have been used to calculate the index relate to marriages of immigrants which took place overseas and are consequently not included in Australian marriage records. Partial investigation suggests that this factor probably overstated the index by very little in 1949, but that the overstatement at present is about 8 per cent.

10. **Masculinity of Live Births.**—The masculinity of live births, i.e., the number of males born for every 100 female births, has remained fairly stable for Australia at about 105. But when the number of births for which masculinity is being calculated is small (for example, State totals), considerable variation is shown. For 1958, the figures ranged from 99.14 in Northern Territory to 113.93 in the Australian Capital Territory. The averages for the ten years 1941–50 were as follows:—New South Wales, 105.49; Victoria, 105.47; Queensland, 105.49; South Australia, 105.78; Western Australia, 104.27; Tasmania, 104.45; Northern Territory, 100.20; Australian Capital Territory, 104.91; Australia, 105.38. The following table shows the figures for Australia for each ten-year period from 1901 to 1950 and for each of the years 1955 to 1958:—

#### MASCUINITY(a) OF LIVE BIRTHS REGISTERED: AUSTRALIA.

Particulars.	1901–10.	1911–20.	1921–30.	1931–40.	1941–50.	1955.	1956.	1957.	1958.
Total Births ..	105.22	105.27	105.55	105.12	105.38	105.16	106.87	105.71	104.98
Ex-nuptial Births	104.08	105.25	105.16	105.36	105.34	104.72	107.16	102.86	104.83

(a) Number of males born for every 100 female births.

11. **Ex-nuptial Live Births.**—(i) *General.* The highest proportion of ex-nuptial births in any one year since 1901 was recorded in 1905, when there were 6,545 ex-nuptial births, representing 6.24 per cent. of total births. Since then the proportion has declined steadily. The largest number of ex-nuptial births was recorded in 1957, when 9,362 were registered, but this number represented only 4.25 per cent. of total births. The lowest proportion was 3.78 per cent. in 1940.

The variations in the proportions of ex-nuptial births as between the individual States and Territories for 1957 are shown below.

**EX-NUPTIAL LIVE BIRTHS : NUMBER AND PROPORTION, 1957.**

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Number ..	3,438	2,065	1,954	651	799	346	87	22	9,362
Proportion of Total Births %	4.33	3.42	5.79	3.33	4.72	4.10	13.47	1.94	4.25

The number and proportion of ex-nuptial births at intervals from 1901 to 1957 are follows:—

**EX-NUPTIAL LIVE BIRTHS : NUMBER AND PROPORTION, AUSTRALIA.**

Particulars.	Annual Average.					1954.	1955.	1956.	1957.
	1901-10.	1911-20.	1921-30.	1931-40.	1941-50.				
Number ..	6,498	6,836	6,238	5,133	6,780	8,027	8,537	8,970	9,362
Proportion of Total Births .. %	6.05	5.22	4.66	4.40	4.13	3.97	4.11	4.23	4.25

It is, of course, possible that the number of ex-nuptial births is somewhat understated owing to diffidence in proclaiming the fact of ex-nuptiality.

(ii) *Rate of Ex-nuptiality.* A further comparison is obtained by calculating the number of ex-nuptial births per thousand of the single, widowed and divorced female population aged from 15 to 44 years. On this basis, the number of ex-nuptial births per 1,000 unmarried women of ages 15 to 44 is as follows:—1880-82, 14.49; 1890-92, 15.93; 1900-02, 13.30; 1910-12, 12.53; 1920-22, 10.50; 1932-34, 6.91; 1946-48, 11.45; and 1953-55, 14.45. Ex-nuptial births to married women, which are not recorded separately, are included in these figures and it is not possible to determine to what extent they influence the trend shown.

(iii) *Comparison of Rates.* The following table, showing the relative proportions of ex-nuptial and nuptial births to the total population, discloses a much greater proportional movement in the ex-nuptial birth rate than in the nuptial rate:—

**CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH RATES(a) : AUSTRALIA.**

Birth Rate.	Annual Average.					1954.	1955.	1956.	1957.
	1901-10.	1911-20.	1921-30.	1931-40.	1941-50.				
Ex-nuptial ..	1.60	1.39	1.04	0.76	0.90	0.89	0.93	0.95	0.97
Nuptial ..	24.91	25.18	21.40	16.47	20.99	21.61	21.64	21.55	21.89
Total ..	26.51	26.57	22.44	17.23	21.89	22.50	22.57	22.50	22.86

(a) Number of births per 1,000 of mean population.

12. *Legitimations.*—Acts have been passed in the several States to legitimize children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Acts, any child who comes within the scope of their purposes, born before or after the passing thereof, is deemed to be legitimate from birth by the post-natal union of its parents, and entitled to the status of offspring born in wedlock. During 1957, the number of children legitimized in Australia was 952.

13. *Multiple Births.*—Because the current Australian birth statistics are based only on those confinements which resulted in a live-born child, the number of confinements for multiple births for Australia is understated—firstly, because in cases where all children of a multiple birth are still-born the confinement is excluded, and secondly, because some cases of multiple births in which only one child was live-born are registered as single births.

During 1957, multiple births recorded on the above basis comprised 2,495 cases of twins and 31 cases of triplets, the resultant numbers of live-born and still-born children being respectively 4,898 and 92 for twins, 90 and 3 for triplets. This represents an average of

11.45 recorded cases of twins and 0.14 recorded cases of triplets per 1,000 confinements or, alternatively, mothers of twins represented 1 in every 87 mothers and mothers of triplets 1 in every 7,029. Total cases of multiple births represented 11.59 per 1,000 confinements or 1 in every 86 mothers.

The proportion of mothers of multiple births to total mothers does not vary greatly from year to year.

14. Ages of Parents.—The relative ages of the parents of children, whose births were registered in 1957, have been tabulated separately for male and female births, multiple births being distinguished from single births. For total births and for multiple births the relative ages of parents are shown in *Demography*, Bulletin No. 75. In the present work the exigencies of space allows only the insertion of a table showing, in respect of confinements resulting in one or more live births, the relative ages of parents in groups of five years.

CONFINEMENTS: RELATIVE AGES OF PARENTS, AUSTRALIA, 1957.

Age of Father (Years) and Type of Birth.		Total.	Age of Mother (Years).							
			Under 15.	15-19.	20-24.	25-29.	30-34.	35-39.	40-44.	45 and over.
Under 20	..	1,595	8	1,299	278	7	3	..	..	..
20-24	..	31,213	3	7,559	20,954	2,479	172	38	8	..
25-29	..	66,578	1	2,513	29,500	30,111	4,026	394	32	1
30-34	..	56,091	..	530	7,550	24,938	20,195	2,679	196	3
35-39	..	30,309	..	87	1,310	6,321	13,110	8,630	830	21
40-44	..	14,912	..	22	330	1,536	4,295	6,122	2,540	67
45-49	..	5,605	..	10	87	411	1,132	2,096	1,704	165
50-54	..	1,667	..	4	27	101	285	627	537	86
55-59	..	496	..	2	10	47	101	183	132	21
60-64	..	119	..	2	5	9	23	36	37	7
65 and over	..	54	..	..	5	2	7	15	22	3
Mothers of Nuptial Children	{ Single .. Twins .. Triplets .. Total ..	206,222 2,386 31 208,639	12 .. 1 12	11,954 73 7 12,028	59,562 487 7 60,056	65,178 780 4 65,962	42,691 647 11 43,349	20,476 336 8 20,820	5,977 61 .. 6,038	372 2 .. 374
Mothers of Ex-nuptial Children	{ Single .. Twins .. Total ..	(a)9,148 109 (a)9,257	34 .. 34	2,082 10 2,092	2,681 32 2,713	1,929 20 1,949	1,377 25 1,402	769 19 788	252 2 254	20 1 21
Total Mothers	{ Single .. Twins .. Triplets .. Total ..	a215370 2,495 31 a217896	46 .. .. 46	14,036 83 1 14,120	62,243 519 7 62,769	67,107 800 4 67,911	44,068 672 11 44,751	21,245 355 8 21,608	6,229 63 .. 6,292	392 3 .. 395

(a) Includes four mothers whose ages were not stated.

15. Birthplaces of Parents.—A table showing birthplaces of parents of children whose births were registered during 1957 appears in *Demography*, Bulletin No. 75.

16. Occupation of Fathers.—A table showing occupations of the fathers of nuptial children whose births were registered in 1957 appears in *Demography*, Bulletin No. 75.

17. Age, Duration of Marriage and Issue of Mothers.—(i) *General*. The total number of nuptial confinements resulting in live births in 1957 was 208,639, comprising 206,222 single births, 2,386 cases of twins, and 31 cases of triplets. The tables relating to previous issue exclude the issue of former marriages and still-born children. On the other hand, they include children by the same father who were born to the mother prior to the marriage. Children born at the present confinement are included in the total issue shown.

(ii) *Duration of Marriage and Issue of Mothers*. The following table shows that, in 1957, the duration of marriage of mothers of nuptial children ranged from less than one year to over 25 years, and that the average family increased fairly regularly with the duration of marriage. The average issue of married mothers who bore children in 1957 was 2.54, compared with 2.52 in 1956, 2.50 in 1955, 2.48 in 1954, and 2.45 in 1953.

**NUPTIAL CONFINEMENTS : DURATION OF MARRIAGE AND ISSUE OF MOTHERS, AUSTRALIA, 1957.**

Duration of Marriage (Years).	Total Married Mothers.	Total Issue.	Average Issue.	Duration of Marriage (Years).	Total Married Mothers.	Total Issue.	Average Issue.
0-1	26,932	27,508	1.02	15-16	2,871	13,957	4.86
1-2	24,310	30,327	1.25	16-17	2,074	10,714	5.17
2-3	23,352	40,457	1.73	17-18	1,687	9,144	5.42
3-4	20,287	41,629	2.05	18-19	1,103	6,454	5.85
4-5	18,097	42,721	2.36	19-20	861	5,423	6.30
5-6	16,316	43,197	2.65	20-21	618	3,938	6.37
6-7	14,224	41,672	2.93	21-22	450	3,001	6.67
7-8	11,971	37,999	3.17	22-23	319	2,221	6.96
8-9	10,050	34,470	3.43	23-24	181	1,365	7.54
9-10	8,818	32,241	3.66	24-25	123	982	7.98
10-11	7,574	29,439	3.89	25 and over	158	1,383	8.75
11-12	5,544	22,563	4.07				
12-13	4,075	17,490	4.29				
13-14	3,431	15,317	4.46				
14-15	3,213	14,935	4.65				
				<b>Total</b>	<b>208,639</b>	<b>530,547</b>	<b>2.54</b>

(iii) *Age and Average Issue of Mothers.* The following table shows the average number of children born to mothers of different ages. In the younger ages there is, naturally, little difference in the average number of children to each mother from year to year, but for mothers in the higher age groups the number of issue has fallen until recently in comparison with past years. In 1957, average issue was greater in all age groups under 40 years than in the decade 1941-50. The average issue of mothers of all ages recorded for 1957 (namely, 2.54) is 21.8 per cent. below the average of 3.25 for the years 1911-20.

**AGE AND AVERAGE ISSUE OF MOTHERS : AUSTRALIA.**

Period.	Age of Mother (Years).							All Ages.
	Under 20.	20-24.	25-29.	30-34.	35-39.	40-44.	45 and over.	
1911-20	1.21	1.75	2.61	3.74	5.11	6.69	8.16	3.25
1921-30	1.20	1.71	2.46	3.48	4.80	6.27	7.74	3.04
1931-40	1.20	1.68	2.30	3.19	4.41	5.89	7.40	2.71
1941-50	1.17	1.56	2.15	2.85	3.67	4.79	6.19	2.37
1957	1.23	1.73	2.48	3.16	3.91	4.63	5.86	2.54

(iv) *Previous Issue of Mothers, Various Ages.* A classification of mothers by age and previous issue is given for 1957 in the following table:—

**NUPTIAL CONFINEMENTS : AGE OF MOTHER AND PREVIOUS ISSUE, AUSTRALIA, 1957.**

Previous Issue.	Age of Mother (Years).							Total Married Mothers.
	Under 20.	20-24.	25-29.	30-34.	35-39.	40-44.	45 and over.	
0	9,613	30,459	16,396	6,374	2,288	631	31	65,792
1	2,157	19,554	21,417	10,054	3,312	707	34	57,235
2	246	7,316	16,202	11,612	4,532	936	37	40,881
3	22	2,096	7,462	7,897	3,975	1,044	45	22,541
4	2	521	2,853	3,903	2,775	851	51	10,956
5	..	91	1,051	1,840	1,676	654	45	5,357
6	..	17	417	877	923	410	29	2,673
7	..	2	127	446	542	278	22	1,417
8	..	..	31	195	397	173	28	824
9	..	..	4	87	210	131	11	443
10 and over	..	..	2	64	190	223	41	520
<b>Total Married Mothers</b>	<b>12,040</b>	<b>60,056</b>	<b>65,962</b>	<b>43,349</b>	<b>20,820</b>	<b>6,038</b>	<b>374</b>	<b>208,639</b>



In 1957 the masculinity of nuptial first births was 107.34 and of total births 105.71.

(ii) *Age of Mother and Duration of Marriage.* A summary showing grouped ages and grouped durations of marriage of mothers of nuptial first-born children is given in the following table:—

**NUPTIAL FIRST BIRTHS: AGE OF MOTHER AND DURATION OF MARRIAGE, AUSTRALIA, 1957.**

Duration of Marriage.	Age of Mother (Years).							Total.
	Under 20.	20-24.	25-29.	30-34.	35-39.	40-44.	45 and over.	
Under 8 months .. .. .	5,794	5,025	1,078	417	186	53	1	12,554
8 months .. .. .	424	1,164	413	133	45	11	..	2,190
9 .. .. .	635	2,759	903	335	76	17	1	4,726
10 .. .. .	532	2,315	804	257	82	20	..	4,010
11 .. .. .	415	1,931	603	205	59	15	..	3,228
Total under 1 year .. .. .	7,800	13,194	3,801	1,347	448	116	2	26,708
1 year and under 2 years .. .. .	1,595	10,874	4,182	1,390	508	145	3	18,697
2 years .. .. .	182	3,978	2,563	792	249	73	7	7,844
3 .. .. .	35	1,573	2,035	507	180	50	2	4,382
4 .. .. .	1	555	1,488	401	139	38	2	2,624
5 .. .. .	..	284	2,274	1,521	425	102	9	4,615
10 .. .. .	..	1	53	394	245	52	..	745
15 years and over .. .. .	..	..	..	22	94	55	6	177
Total .. .. .	9,613	30,459	16,396	6,374	2,288	631	31	65,792

(iii) *Nuptial First Births and Subsequent Births.* The following table provides a comparison between the numbers of nuptial first births and subsequent births in periods since 1911 and shows also the proportion of first to total nuptial confinements.

**NUPTIAL FIRST BIRTHS AND SUBSEQUENT BIRTHS : AUSTRALIA.**

Period.	Nuptial Confinements.			Proportion of First to Total Nuptial Confinements (Per Cent.).
	First Births.	Other Births.	Total.	

**ANNUAL AVERAGES.**

1911-20 .. .. .	33,595	88,997	122,592	27.40
1921-30 .. .. .	38,120	88,086	126,206	30.20
1931-40 .. .. .	39,243	71,136	110,379	35.55
1941-50 .. .. .	58,818	96,994	155,812	37.75

**ANNUAL TOTALS.**

1953 .. .. .	63,726	128,187	191,913	33.21
1954 .. .. .	62,029	129,989	192,018	32.30
1955 .. .. .	62,238	134,679	196,917	31.61
1956 .. .. .	63,646	137,217	200,863	31.69
1957 .. .. .	65,792	142,847	208,639	31.53

19. *Stillbirths.*—Registration of stillbirths is not compulsory in all Australian States. It has been compulsory in Western Australia since 14th January, 1908; in the Australian Capital Territory since 1st January, 1930; in New South Wales since 1st April, 1935; in South Australia since 1st May, 1937; in the Northern Territory since 1949; and in Victoria from 1st January, 1953. In Queensland and Tasmania, where registration is not enforced, some information is obtained by notification of stillbirths for various purposes. Because registration is not compulsory in all States, detailed statistics of stillbirths for Australia as a whole have not been compiled.

The number of stillbirths in each State and Territory, as recorded since 1936 by the means outlined above, is shown in the following table:—

## STILLBIRTHS.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
ANNUAL AVERAGES.									
1936-40 ..	1,409	854	(a)	(b) 274	234	144	(a)	5	(a)
1941-45 ..	1,478	966	(c) 657	324	248	143	(a)	9	de 3,825
1946-50 ..	1,405	949	626	368	274	161	(a)	12	(e) 3,795
1951-55 ..	1,239	849	581	290	271	139	8	15	3,392
ANNUAL TOTALS.									
1953 ..	1,257	817	585	287	268	141	8	16	3,379
1954 ..	1,207	794	554	254	270	124	8	19	3,230
1955 ..	1,243	788	521	271	239	109	7	13	3,191
1956 ..	1,273	819	556	274	226	122	4	28	3,302
1957 ..	1,282	870	584	297	273	104	4	9	3,423

(a) Not available. (b) Three years 1938-40. (c) Four years 1942-45. (d) Excludes Queensland for 1941. (e) Excludes the Northern Territory.

The incidence of stillbirths in each State and Territory as measured by the rate per 1,000 of all births, both live and still, is as follows:—

## PROPORTION OF STILLBIRTHS.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
AVERAGE ANNUAL RATES.									
1936-40 ..	28.71	27.43	(b)	c27.49	25.70	28.75	(b)	22.18	(b)
1941-45 ..	25.46	24.79	d26.76	25.17	23.29	25.68	(b)	22.87	ef 25.25
1946-50 ..	19.99	19.64	21.87	22.12	20.46	22.26	(b)	16.35	f 20.46
1951-55 ..	16.52	15.55	18.41	15.80	16.97	17.54	17.20	15.58	16.56
ANNUAL RATES.									
1953 ..	16.51	15.02	18.65	15.56	16.62	17.90	17.09	19.90	16.43
1954 ..	16.24	14.32	17.46	13.74	16.67	15.71	15.36	21.69	15.72
1955 ..	16.43	13.79	15.85	14.44	14.17	13.30	13.41	14.87	15.13
1956 ..	16.54	13.83	16.87	14.24	13.18	14.83	7.14	25.34	15.33
1957 ..	15.88	14.18	17.00	14.98	15.87	12.18	6.15	7.87	15.30

(a) Number of stillbirths per 1,000 of all births (live and still). (b) Not available. (c) Three years 1938-40. (d) Four years 1942-45. (e) Excludes Queensland for 1941. (f) Excludes the Northern Territory.

## § 5. Mortality.

NOTE.—See NOTE at the beginning of this chapter. A detailed analysis for 1957 of causes of death and other characteristics such as issue will be found in *Demography*, Bulletin No. 75.

1. Number of Deaths.—(i) Year 1958. The following table shows the number of deaths, male and female, registered in each State and Territory during the year. Stillbirths, although registered as both births and deaths in some States, are excluded from the death statistics published herein.

## DEATHS, 1958.

Sex.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Males ..	18,279	12,779	6,729	4,262	3,270	1,534	87	110	47,050
Females ..	14,071	10,846	4,726	3,481	2,284	1,174	19	72	36,673
Persons ..	32,350	23,625	11,455	7,743	5,554	2,708	106	182	83,723

(ii) *Years 1931 to 1958.* A summary of the number of deaths in each State and Territory from 1931 to 1958 is given in the following table. Annual averages for each five-year period from 1861 to 1950 were published in Official Year Book No. 39, page 597.

## DEATHS.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
ANNUAL AVERAGES.									
1931-35 ..	22,591	17,680	8,147	5,063	3,876	2,194	67	35	59,653
1936-40(a) ..	25,735	19,361	9,107	5,540	4,270	2,342	73	54	66,482
1941-45(a) ..	27,807	20,964	9,715	6,303	4,724	2,488	64	71	72,136
1946-50(a) ..	29,552	21,827	10,357	6,507	4,802	2,459	76	103	75,683
1951-55 ..	32,135	22,900	11,187	7,182	5,263	2,576	109	131	81,483
ANNUAL TOTALS.									
1954 ..	32,444	22,554	11,344	7,179	5,364	2,696	106	118	81,805
1955 ..	32,553	22,527	11,307	7,536	5,379	2,489	119	126	82,036
1956 ..	34,064	23,886	12,186	7,593	5,572	2,513	107	167	86,088
1957 ..	33,317	24,131	11,679	7,576	5,297	2,670	115	168	84,953
1958 ..	32,350	23,625	11,455	7,743	5,554	2,708	106	182	83,723

(a) Excludes deaths of defence personnel and of internees and prisoners of war from overseas for the period September, 1939 to June, 1947.

A graph showing the number of deaths in each year from 1860 to 1958 will be found on page 333.

2. *Crude Death Rates.*—The commonest method of measuring the mortality rate is to relate the number of deaths for a given period to the mean population for that period, thus obtaining the crude death rate. This rate for a given period measures the number per thousand of population by which the population is depleted through deaths during that period. Crude death rates for each State and Territory from 1931 to 1958 are shown in the following table.

## CRUDE DEATH RATES.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
AVERAGE ANNUAL RATES.									
1931-35 ..	8.68	9.72	8.62	8.72	8.83	9.62	13.46	3.81	9.00
1936-40(b) ..	9.45	10.36	9.08	9.33	9.22	9.91	11.69	4.54	9.63
1941-45(b) ..	9.73	10.63	9.24	10.26	9.86	10.21	6.43	4.98	9.96
1946-50(b) ..	9.70	10.37	9.13	9.76	9.23	9.30	6.27	5.31	9.74
1951-55 ..	9.49	9.55	8.71	9.25	8.49	8.47	6.92	(c)4.60	9.25
ANNUAL RATES.									
1954 ..	9.46	9.19	8.64	9.01	8.38	8.67	6.54	3.88	9.10
1955 ..	9.32	8.92	8.44	9.19	8.17	7.87	6.98	(c)3.89	8.91
1956 ..	9.58	9.17	8.92	8.95	8.23	7.80	5.98	(c)4.81	9.13
1957 ..	9.20	9.03	8.39	8.67	7.66	8.09	6.14	(c)4.46	8.81
1958—									
Males ..	9.87	9.26	9.29	9.37	9.03	8.78	8.03	5.00	9.45
Females ..	7.64	7.98	6.85	7.87	6.65	7.21	2.26	3.76	7.53
Persons ..	8.76	8.62	8.10	8.63	7.87	8.02	5.51	4.43	8.50

(a) Number of deaths per 1,000 of mean population. (b) Excludes deaths of defence personnel from September, 1939 to June, 1947. (c) Revised rates based on population estimates adjusted in accordance with the June, 1957 Population Count of Canberra are as follows:—1951-55, 4.58; 1955, 3.85; 1956, 4.72; 1957, 4.42.

A graph showing the crude death rate for each year from 1860 to 1958 will be found on page 334.

3. **Standardized Death Rates.**—(i) *General.* The death rates quoted above are crude rates, i.e., they simply show the number of deaths per thousand of mean population without taking into consideration differences in the sex and age composition of the population. Other conditions being equal, however, the crude death rate of a community will be low if it contains a large proportion of young people (not infants), and conversely it will be relatively high if the population includes a large proportion of elderly people. The foregoing table of crude death rates, therefore, does not indicate comparative incidence of mortality either as between States in the same year or in any one State over a period of years. In order to obtain a comparison of mortality rates on a uniform basis as far as sex and age constitution are concerned, "standardized" death rates may be computed. These are computed by selecting a particular distribution of age and sex as a standard, and then calculating what would have been the general death rate if the death rates for each sex and in each age group had been as recorded, but the age and sex distribution had been the same as in the standard population. For the standardized rates which follow, the standard population compiled by the International Institute of Statistics has been used. This standard is based upon the age distribution according to sex of nineteen European countries at their censuses nearest to the year 1900. Full details of the "Standard Population" were published in Official Year Book No. 22, page 962.

(ii) *Death Rates in Age Groups.* An examination of the age distribution of deaths and the resultant age-specific death rates is made in paragraph 9, page 354.

(iii) *Comparison of Crude and Standardized Death Rates.* The relative incidence of mortality as between individual States and as between the years 1921, 1933, 1947 and 1954 is illustrated in the following statement of crude and "standardized" death rates. These years have been chosen for comparison because the census data give essential information as to sexes and ages of the State populations. Crude death rates are shown to indicate the degree to which they disguise the true position.

#### CRUDE AND STANDARDIZED DEATH RATES.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>Crude Death Rate(a)—</b>							
1921 .. ..	9.50	10.52	9.37	10.02	10.42	10.30	9.91
1933 .. ..	8.58	9.59	8.84	8.44	8.64	9.60	8.92
1947 .. ..	9.53	10.44	9.15	9.61	9.39	9.17	9.69
1954 .. ..	9.46	9.19	8.64	9.01	8.38	8.67	9.10
<b>Standardized Death Rate(b)—</b>							
1921 .. ..	10.35	10.79	10.24	10.38	11.88	10.83	10.58
1933 .. ..	8.52	8.74	9.10	7.66	8.74	8.86	8.62
1947 .. ..	7.44	7.31	7.47	6.77	7.28	7.21	7.34
1954 .. ..	7.24	6.63	6.80	6.52	6.71	7.02	6.90

(a) Total deaths per 1,000 of mean population.  
in para. 3 (i) above.

(b) See explanation of standardized death rates

The comparisons above relate to individual years in which a census of population was taken and should not be used as the basis for general conclusions as to changes in incidence of mortality for other than those years.

4. **True Death Rates.**—The main objections to standardized death rates are that the choice of a standard population is arbitrary and that the standardized rates have little value except for comparative purposes, and even then variation of the standard population may make appreciable differences. However a correct measurement of the mortality of the population can be obtained from life tables. A life table represents the number of survivors at each age from a group of newly-born children who are subject to given mortality conditions, and from such a table the complete expectation of life at birth can be calculated. The reciprocal of this figure is known as the true death rate, since, if the complete expectation of life of a person at birth is 50 years, say, then each person will on the average die 50 years after birth, so that in the standard population one person in 50 or 20 per thousand will die each year. The true death rate for a given period is unaffected by the particular age distribution of that period and is determined solely by the mortality experience of the period as manifested in the rate of survivorship from each year of age to the next. The table below sets out complete expectation of life at birth and true death rates for the periods covered by Australian life tables.

**COMPLETE EXPECTATION OF LIFE AT BIRTH AND TRUE DEATH RATES :  
AUSTRALIA.**

Period.	Complete Expectation of Life at Birth (Years).		True Death Rate.	
	Males.	Females.	Males.(a)	Females.(b)
1881-1890 .. .. .	47.20	50.84	21.19	19.67
1891-1900 .. .. .	51.06	54.76	19.58	18.26
1901-1910 .. .. .	55.20	58.84	18.12	17.00
1920-1922 .. .. .	59.15	63.31	16.91	15.80
1932-1934 .. .. .	63.48	67.14	15.75	14.89
1946-1948 .. .. .	66.07	70.63	15.14	14.16
1953-1955 .. .. .	67.14	72.75	14.89	13.75

(a) Number of deaths per 1,000 males in life table or stationary population. (b) Number of deaths per 1,000 females in life table or stationary population.

5. **Crude Death Rates, Various Countries.**—The following table gives crude death rates for Australia in comparison with rates for various other countries.

**CRUDE DEATH RATES(a) : VARIOUS COUNTRIES.**

Country.	1921-25.	1926-30.	1931-35.	1957.	Country.	1921-25.	1926-30.	1931-35.	1957.
Netherlands ..	10.4	9.9	8.9	7.5	Sweden ..	12.1	12.1	11.6	9.9
Canada ..	11.2	11.1	9.7	8.2	Spain ..	20.2	17.9	16.4	10.0
Japan ..	21.8	19.3	17.9	8.3	Switzerland ..	12.5	12.1	11.8	10.0
Norway ..	11.5	11.0	10.4	8.6	Italy ..	17.4	16.0	14.1	10.0
Union of South Africa(b) ..	9.7	9.7	9.8	8.8	Yugoslavia ..	20.2	20.0	17.9	10.5
Australia(c) ..	9.5	9.3	9.0	8.8	United Kingdom ..	12.4	12.3	12.2	11.5
Denmark ..	11.3	11.1	10.9	9.3	Ireland, Republic of ..	14.6	14.4	14.0	11.9
New Zealand(d) ..	8.6	8.6	8.2	9.4	France ..	17.2	16.8	15.7	12.0
Finland ..	15.1	14.8	13.3	9.4	Belgium ..	13.4	13.7	12.9	12.4
United States of America ..	11.8	11.8	e 10.9	9.6	Austria ..	15.8	14.4	13.5	12.8

(a) Number of deaths per 1,000 of mean or mid-year population. (b) White population only.  
(c) Excludes full-blood aboriginals. (d) Excludes Maoris. (e) 1933-35.

6. **True Death Rates, Various Countries.**—The following table gives true death rates for Australia in comparison with rates for various other countries:—

**TRUE DEATH RATES : VARIOUS COUNTRIES.**

Country.	Period.	True Death Rate.		Country.	Period.	True Death Rate.	
		Males.(a)	Females.(b)			Males.(a)	Females.(b)
Netherlands ..	1953-55	14.1	13.5	Scotland ..	1956	15.2	14.0
Norway ..	1951-55	14.1	13.4	Northern Ireland ..	1950-52	15.3	14.5
Sweden ..	1951-55	14.2	13.6	Germany, Federal Republic ..	1952-53	15.4	14.5
New Zealand(c) ..	1950-52	14.6	13.8	Ireland, Republic of ..	1950-52	15.5	14.9
Denmark ..	1951-53	14.3	13.8	France ..	1950-51	15.7	14.4
England and Wales ..	1953-55	14.8	13.7	Japan ..	1955	15.7	14.6
United States of America—				Union of South Africa(e) ..	1945-47	15.7	14.6
Whites ..	1956	14.9	13.6	Finland ..	1951-55	15.9	14.3
Others ..	1956	16.4	15.2	Belgium ..	1946-49	16.1	14.9
Australia(d) ..	1953-55	14.9	13.8	Austria ..	1949-51	16.2	14.9
Canada ..	1950-52	15.1	14.1				
Switzerland ..	1948-53	15.1	14.1				

(a) Number of deaths per 1,000 males in life table or stationary population (see explanation on p. 345).  
(b) Number of deaths per 1,000 females in life table or stationary population (see explanation on p. 345).  
(c) Excludes Maoris. (d) Excludes full-blood aboriginals. (e) White population only.

7. *Australian Life Tables.*—(i) *Life Tables prior to 1954.* It has been the practice at each census from 1911 onwards to prepare Life Tables representative of the mortality experience of Australia. The mortality of the Australian population for the thirty years from 1881 to 1910 inclusive was investigated in 1911 by the Commonwealth Statistician. Tables were compiled for each State and for Australia as a whole in respect of each sex for each of the decennial periods 1881–1890, 1891–1900 and 1901–1910. These compilations furnished a comprehensive view of Australian mortality in respect of sex, of time, and of geographical distribution, and practically superseded all Life Tables prepared in Australia prior to 1911. In addition, monetary tables based on the experience for the whole of Australia for the ten years 1901–1910 were prepared and published.

At the Census of 1921, Life Tables were prepared by the Commonwealth Statistician from the population recorded and the deaths in the three years 1920 to 1922. In 1933 and 1947, Life Tables based on the census population and the deaths in the years 1932 to 1934 and 1946 to 1948 respectively were compiled by the Commonwealth Actuary.

(ii) *Life Tables of Census of 1954.* On the occasion of the 1954 Census, the seventh in the series of Life Tables were compiled by the Commonwealth Actuary. These were based on the population recorded at the Census, adjusted to allow for variation in the net movement into Australia over the years 1953 to 1955, and deaths during these years. Full particulars of the data used, the method of construction and the tabulations of these Life Tables will be found in the report of the Commonwealth Actuary which was published by the Commonwealth Statistician in 1958. This report will also appear in Volume VIII of the detailed tables of the 1954 Census.

The main features of the tables, including comparisons with earlier Australian tables and the latest experience in the United Kingdom and New Zealand are set out in the following summary tables.

## COMPARATIVE TABLES.

1. RATES OF MORTALITY ( $q_x$ ) AT REPRESENTATIVE AGES.

Age (x).	1901–10.	1920–22.	1932–34.	1946–48.	1953–55.
MALES.					
0 .. .. .	.09510	.07132	.04543	.03199	.02521
10 .. .. .	.00179	.00156	.00119	.00072	.00056
20 .. .. .	.00370	.00284	.00219	.00169	.00186
30 .. .. .	.00519	.00390	.00271	.00186	.00170
40 .. .. .	.00816	.00617	.00460	.00337	.00297
50 .. .. .	.01395	.01158	.00966	.00919	.00819
60 .. .. .	.02584	.02407	.02216	.02278	.02221
70 .. .. .	.06162	.05290	.05082	.05256	.05315
80 .. .. .	.13795	.13340	.12659	.12011	.11958
FEMALES.					
0 .. .. .	.07953	.05568	.03642	.02519	.01989
10 .. .. .	.00159	.00127	.00087	.00050	.00035
20 .. .. .	.00329	.00252	.00183	.00091	.00064
30 .. .. .	.00519	.00387	.00279	.00165	.00096
40 .. .. .	.00718	.00524	.00402	.00284	.00217
50 .. .. .	.00956	.00808	.00744	.00641	.00530
60 .. .. .	.01920	.01571	.01466	.01360	.01203
70 .. .. .	.04777	.04090	.03802	.03607	.03250
80 .. .. .	.11333	.11230	.10106	.10027	.09314

## 2. RATES OF MORTALITY FOR ONE PERIOD AS A PROPORTION OF THE RATES FOR THE PRECEDING PERIOD.

Age.	Males.				Females.			
	1920–22	1932–34	1946–48	1953–55	1920–22	1932–34	1946–48	1953–55
	1901–10.	1920–22.	1932–34.	1946–48.	1901–10.	1920–22.	1932–34.	1946–48.
0 .. .. .	.75	.64	.70	.79	.70	.65	.69	.79
10 .. .. .	.87	.76	.61	.78	.80	.69	.57	.70
20 .. .. .	.77	.77	.77	1.10	.77	.73	.50	.70
30 .. .. .	.75	.69	.69	.91	.75	.72	.59	.58
40 .. .. .	.76	.75	.73	.88	.73	.77	.71	.76
50 .. .. .	.83	.83	.95	.89	.85	.92	.86	.83
60 .. .. .	.93	.92	1.03	.97	.82	.93	.93	.88
70 .. .. .	.86	.96	1.03	1.01	.86	.93	.95	.90
80 .. .. .	.97	.95	.95	1.00	.99	.90	.99	.93

3. RATES OF MORTALITY FOR PERIODS SINCE 1901-10.  
AS A PROPORTION OF THE RATES FOR THE PERIOD 1901-10

Age.	Males.				Females.			
	1920-22	1932-34	1946-48	1953-55	1920-22	1932-34	1946-48	1953-55
	1901-10.	1901-10.	1901-10.	1901-10.	1901-10.	1901-10.	1901-10.	1901-10.
0 ..	.75	.48	.34	.27	.70	.46	.32	.25
10 ..	.87	.66	.40	.31	.80	.55	.31	.22
20 ..	.77	.59	.46	.50	.77	.56	.28	.19
30 ..	.75	.52	.36	.33	.75	.54	.32	.18
40 ..	.76	.56	.41	.36	.73	.56	.40	.30
50 ..	.83	.69	.66	.59	.85	.78	.67	.55
60 ..	.93	.86	.88	.86	.82	.76	.71	.63
70 ..	.86	.82	.85	.86	.86	.80	.76	.68
80 ..	.97	.92	.87	.87	.99	.89	.88	.82

4. NUMBER OF SURVIVORS ( $l_x$ ) AT SELECTED AGES OUT OF 100,000 BIRTHS.

Age (x).	Males.				Females.			
	1920-22.	1932-34.	1946-48.	1953-55.	1920-22.	1932-34.	1946-48.	1953-55.
0 ..	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
10 ..	89,389	93,193	95,619	96,488	91,314	94,424	96,549	97,228
20 ..	87,697	91,797	94,562	95,460	89,906	93,341	95,953	96,774
30 ..	84,743	89,566	92,967	93,801	87,086	91,174	94,740	96,055
40 ..	80,813	86,539	90,823	91,861	83,279	88,175	92,758	94,715
50 ..	74,330	81,061	85,946	87,553	78,313	83,680	89,011	91,573
60 ..	63,386	69,950	74,251	76,256	70,150	75,565	81,257	84,665
70 ..	44,332	50,086	52,230	54,054	54,771	59,629	65,398	69,613
80 ..	18,614	22,223	22,785	23,658	27,170	31,539	35,401	39,633
90 ..	2,141	2,935	3,144	3,507	4,238	5,808	6,556	8,087

5. COMPLETE EXPECTATION OF LIFE ( $e_x$ ) AT SELECTED AGES.

Age (x)	Males.				Females.			
	1920-22.	1932-34.	1946-48.	1953-55.	1920-22.	1932-34.	1946-48.	1953-55.
0 ..	59.15	63.48	66.07	67.14	63.31	67.14	70.63	72.75
10 ..	56.01	58.02	59.04	59.53	59.20	61.02	63.11	64.78
20 ..	46.99	48.81	49.64	50.10	50.03	51.67	53.47	55.06
30 ..	38.44	39.90	40.40	40.90	41.48	42.77	44.08	45.43
40 ..	30.05	31.11	31.23	31.65	33.14	34.04	34.91	35.99
50 ..	22.20	22.83	22.67	22.92	24.90	25.58	26.14	27.03
60 ..	15.08	15.57	15.36	15.47	17.17	17.74	18.11	18.78
70 ..	9.26	9.60	9.55	9.59	10.41	10.98	11.14	11.62
80 ..	5.00	5.22	5.36	5.47	5.61	6.01	6.02	6.30

6. RATES OF MORTALITY ( $q_x$ ) AT SELECTED AGES FROM 1953-55 EXPERIENCE COMPARED WITH RECENT RATES OF MORTALITY FOR THE UNITED KINGDOM AND NEW ZEALAND.

Age (x)	Males.			Females.		
	Australia 1953-55.	United Kingdom 1950-52.	New Zealand 1950-52.	Australia 1953-55.	United Kingdom 1950-52.	New Zealand 1950-52.
0 .. ..	.02521	.03266	.02499	.01989	.02510	.01995
10 .. ..	.00056	.00052	.00050	.00035	.00035	.00028
20 .. ..	.00186	.00129	.00161	.00064	.00083	.00068
30 .. ..	.00170	.00157	.00160	.00096	.00127	.00110
40 .. ..	.00297	.00290	.00268	.00217	.00227	.00209
50 .. ..	.00819	.00850	.00727	.00530	.00524	.00552
60 .. ..	.02221	.02369	.01951	.01203	.01271	.01316
70 .. ..	.05315	.05651	.04723	.03250	.03532	.03282
80 .. ..	.11958	.13629	.11260	.09314	.10466	.09334

7. RATES OF MORTALITY FROM 1953-55 AUSTRALIAN EXPERIENCE, AS A PROPORTION OF THE RATES FOR THE UNITED KINGDOM AND NEW ZEALAND.

Age (x).	Males.		Females.	
	Australia 1953-55 United Kingdom 1950-52.	Australia 1953-55 New Zealand 1950-52.	Australia 1953-55 United Kingdom 1950-52.	Australia 1953-55 New Zealand 1950-52.
0 .. ..	.77	1.01	.79	1.00
10 .. ..	1.08	1.12	1.00	1.25
20 .. ..	1.44	1.16	.77	.94
30 .. ..	1.08	1.06	.76	.87
40 .. ..	1.02	1.11	.96	1.04
50 .. ..	.96	1.13	1.01	.96
60 .. ..	.94	1.14	.95	.91
70 .. ..	.94	1.13	.92	.99
80 .. ..	.88	1.06	.89	1.00

The main features of the mortality rates are:—

(a) *Male Mortality.* With the exception of ages 16 to 26 inclusive, and 69 to 73 inclusive, the 1953-55 mortality rates are less than those for 1946-48. The most significant reduction has occurred at age 0, where the mortality rate is 79 per cent. of the corresponding rate for 1946-48, and only 27 per cent. of the experience for the period 1901-1910.

The most disturbing feature of the current experience has been the increase in mortality which has occurred in the 16-26 age group. This is the result of heavier mortality from accidents of all types, which has more than counterbalanced a decrease in the rates of mortality due to other causes.

At advanced ages, the experience suggests that only a slight improvement in male mortality has occurred since 1946-48.

(b) *Female Mortality.* The comparative tables above show that very substantial decreases in female mortality rates have occurred over the whole range of ages since the 1946-48 experience. This improvement has been considerably greater overall than that for males.

Accident mortality among females, which has never been as significant as among males has increased very slightly but this increase has been more than offset by the reduction in the mortality from other causes. There is a notable disparity between the high male accident rate and the low female rate.

In the 1946-48 experience, female mortality from causes other than accident was, in the age range 20 to 39 years, heavier than the corresponding male mortality. For 1953-55, however, the position has been reversed. At high ages the female mortality rates have shown substantially greater improvement since 1946-48 than the male rates.

8. Infant Deaths and Death Rates.—(i) States. (a) *Under One Year.* For each State and Territory the number of deaths under one year of age and the rates of infant mortality during the period 1931 to 1958 were as follows:—

**INFANT MORTALITY : UNDER ONE YEAR.**

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
ANNUAL AVERAGES.									
1931-35 ..	1,885	1,214	690	304	329	202	6	5	4,635
1936-40 ..	1,963	1,139	718	311	352	201	6	5	4,695
1941-45 ..	2,034	1,311	804	413	347	213	7	7	5,136
1946-50 ..	1,990	1,129	770	431	370	187	11	14	4,902
1951-55 ..	1,852	1,113	730	407	384	184	17	14	4,701

ANNUAL TOTALS.									
1954 ..	1,850	1,055	695	388	359	186	9	4	4,546
1955 ..	1,850	1,035	656	431	373	189	26	12	4,572
1956 ..	1,777	1,128	737	377	384	170	24	11	4,608
1957 ..	1,804	1,219	732	403	357	170	22	10	4,717
1958 ..	1,704	1,178	657	449	360	167	22	23	4,560

AVERAGE ANNUAL RATES.(a)									
1931-35 ..	41.92	42.76	39.46	35.12	40.81	44.47	80.60	34.48	41.27
1936-40 ..	41.18	37.63	36.75	33.08	39.70	41.23	44.80	21.78	38.81
1941-45 ..	35.95	34.50	34.30	32.95	33.30	39.31	61.73	18.72	34.97
1946-50 ..	28.91	23.82	27.49	26.50	28.15	26.53	37.37	19.89	26.98
1951-55 ..	25.11	20.70	23.58	22.55	24.41	23.67	36.28	15.40	23.34

ANNUAL RATES.(a)									
1954 ..	25.30	19.30	22.29	21.29	22.54	23.94	17.54	4.67	22.48
1955 ..	24.86	18.37	20.28	23.30	22.44	23.37	50.49	13.94	22.01
1956 ..	23.47	19.32	22.74	19.88	22.70	20.98	43.17	10.21	21.72
1957 ..	22.70	20.16	21.68	20.63	21.09	20.15	34.06	8.82	21.41
1958 ..	21.29	19.23	19.40	22.40	21.52	19.49	31.56	18.04	20.49

(a) Number of deaths of children aged under one year per 1,000 live births registered.

(b) *Under Four Weeks.* The following table shows infant mortality rates under four weeks of age in each State and Territory during the period 1931 to 1957.

**INFANT MORTALITY RATES (a): UNDER FOUR WEEKS.**

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
AVERAGE ANNUAL RATES.									
1931-35 ..	27.62	27.78	27.91	22.99	25.11	30.09	35.26	23.45	27.27
1936-40 ..	27.63	25.94	26.15	21.62	22.62	29.56	28.80	16.33	26.19
1941-45 ..	24.52	24.40	24.41	20.86	20.60	27.24	33.57	12.54	23.97
1946-50 ..	20.53	17.55	19.95	18.38	19.53	19.34	21.45	15.80	19.34
1951-55 ..	17.34	15.18	17.09	14.95	17.27	16.34	19.63	11.28	16.45

ANNUAL RATES.									
1953 ..	17.17	15.70	17.80	13.99	16.45	15.51	23.91	13.96	16.48
1954 ..	17.70	14.42	16.81	15.25	16.07	16.47	7.80	3.50	16.19
1955 ..	17.31	13.49	14.84	14.11	16.00	16.81	33.01	11.61	15.50
1956 ..	16.97	14.13	16.35	13.55	15.90	14.56	30.58	7.43	15.60
1957 ..	16.39	15.02	15.22	13.77	15.13	13.63	18.58	7.06	15.36

(a) Number of deaths of children aged under four weeks per 1,000 live births registered.

(c) *Four Weeks and under One Year.* Infant mortality rates for children aged four weeks and under one year are shown in the following table for the period 1931 to 1957.

**INFANT MORTALITY RATES(a) : FOUR WEEKS AND UNDER ONE YEAR.**

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W Aust.	Tas.	N.T.	A.C.T.	Aust.
<b>AVERAGE ANNUAL RATES.</b>									
1931-35 ..	14.30	14.98	11.55	12.13	15.70	14.38	45.34	11.03	14.00
1936-40 ..	13.55	11.69	10.60	11.46	17.08	11.67	16.00	5.45	12.62
1941-45 ..	11.77	10.33	10.14	12.34	12.77	12.30	22.40	6.21	11.27
1946-50 ..	8.38	6.27	7.54	8.12	8.62	7.19	15.92	4.09	7.64
1951-55 ..	7.77	5.52	6.49	7.60	7.14	7.33	16.65	4.12	6.89
<b>ANNUAL RATES.</b>									
1953 ..	7.48	5.45	7.18	6.66	7.38	7.37	15.22	7.61	6.82
1954 ..	7.60	4.88	5.48	6.04	6.47	7.47	9.74	1.17	6.29
1955 ..	7.55	4.88	5.44	9.19	6.44	6.56	17.48	2.33	6.51
1956 ..	6.50	5.19	6.39	6.33	6.80	6.42	12.59	2.79	6.12
1957 ..	6.31	5.14	6.46	6.86	5.96	6.52	15.48	1.76	6.05

(a) Number of deaths of children aged four weeks and under one year per 1,000 live births registered.

(ii) *Australia. (a) Under One Year.* The universal experience that during the first few years of life the higher death rate of male infants tends to counteract the excess of male births is confirmed by the fact that out of 536,330 male infants born from 1953 to 1957, 13,170 (24.56 per 1,000) died during the first year of life, while of 508,329 female infants only 9,986 (19.65 per 1,000) died during the first year. Stillbirths, for which masculinity is also higher, are not included in any of the tables relating to deaths.

As shown by the following table, the disparity is greater during the first four weeks of life, termed the neonatal period, than during the remainder of the first year of life, or the post-neonatal period.

**INFANT DEATHS AND MORTALITY RATES : AUSTRALIA.**

Period.	Number of Deaths.						Rates.(a)					
	Neonatal— Under Four Weeks.		Post- Neonatal— Four Weeks and under One Year.		Total under One Year.		Neonatal— Under Four Weeks.		Post- Neonatal— Four Weeks and under One Year.		Total under One Year.	
	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.
<b>ANNUAL AVERAGES.</b>												
1931-35 ..	1,763	1,299	886	687	2,649	1,986	30.62	23.73	15.38	12.55	46.00	36.28
1936-40 ..	1,816	1,353	863	663	2,679	2,016	29.30	22.93	13.93	11.23	43.23	34.16
1941-45 ..	2,007	1,495	914	720	2,921	2,215	26.66	20.88	12.14	10.05	38.80	30.93
1946-50 ..	2,024	1,490	784	604	2,808	2,094	21.68	16.86	8.40	6.84	30.08	23.70
1951-55 ..	1,907	1,406	776	612	2,683	2,018	18.47	14.32	7.52	6.24	25.99	20.56
<b>ANNUAL TOTALS.</b>												
1953 ..	1,889	1,443	772	609	2,661	2,052	18.25	14.61	7.46	6.17	25.71	20.78
1954 ..	1,914	1,361	694	577	2,608	1,938	18.48	13.79	6.70	5.85	25.18	19.64
1955 ..	1,863	1,355	762	592	2,625	1,947	17.50	13.39	7.16	5.84	24.66	19.23
1956 ..	1,879	1,430	704	595	2,583	2,025	17.15	13.95	6.42	5.80	23.57	19.75
1957 ..	1,953	1,431	740	593	2,693	2,024	17.25	13.36	6.53	5.53	23.78	18.89

(a) Number of deaths per 1,000 male or female live births registered.

(b) *Under Four Weeks.* The following table shows particulars of infant deaths in the first four weeks of life, or the neonatal period, from 1931 to 1957. It will be seen that, for both males and females, the risk of death is very much greater during the first day of life than subsequently.

**INFANT DEATHS AND MORTALITY RATES—UNDER FOUR WEEKS :  
AUSTRALIA.**

Period.	Number of Deaths.						Rates.(a)					
	Early Neonatal.				Late Neonatal— One Week and under Four Weeks.		Early Neonatal.				Late Neonatal— One Week and under Four Weeks.	
	Under One Day.		One Day and under One Week.				Under One Day.		One Day and under One Week.			
	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.
	<b>ANNUAL AVERAGES.</b>						<b>AVERAGE ANNUAL RATES.</b>					
1931-35 ..	(b)	(b)	c 1,442	c 1,066	321	233	(b)	(b)	c25.04	c19.48	5.58	4.25
1936-40 ..	(b)	(b)	c 1,496	c 1,120	320	233	(b)	(b)	c24.13	c18.99	5.17	3.94
1941-45 ..	906	674	728	541	373	280	12.03	9.42	9.67	7.55	4.96	3.91
1946-50 ..	986	731	758	539	280	220	10.56	8.28	8.12	6.09	3.00	2.49
1951-55 ..	918	713	742	508	247	185	8.88	7.26	7.19	5.17	2.40	1.89
	<b>ANNUAL TOTALS.</b>						<b>ANNUAL RATES.</b>					
1953 ..	870	751	738	485	281	207	8.41	7.60	7.13	4.91	2.71	2.10
1954 ..	943	696	725	520	246	245	9.11	7.05	7.00	5.27	2.37	1.47
1955 ..	889	686	740	496	234	173	8.35	6.78	6.95	4.90	2.20	1.71
1956 ..	933	754	714	478	232	198	8.51	7.35	6.52	4.66	2.12	1.93
1957 ..	1,020	789	685	478	248	164	9.01	7.37	6.05	4.46	2.19	1.53

(a) Number of deaths per 1,000 live births registered. under one day.

(b) Not available.

(c) Includes

The foregoing tables indicate the decrease in infant mortality in Australia, the mortality rate of children aged under one year per 1,000 live births for 1957 being 52 per cent. of the average rate for 1931-35. The improvement was due largely to the decrease in deaths from preventable causes, the mortality rate for children aged one week but under one year of age declining by 58 per cent., while that for children aged under one week declined by only 40 per cent.

A graph showing infant mortality rates for each year from 1910 to 1958 will be found on page 335.

(iii) *Statistical Divisions.* The total numbers of births and of deaths of children under one year of age in each statistical division are shown in the annual bulletin, *Demography*.

(iv) *Various Countries.* Compared with other countries Australia occupies a favourable position in respect of infant mortality. In 1957, only New Zealand, Sweden and the Netherlands recorded a lower rate than Australia.

**INFANT MORTALITY RATES : VARIOUS COUNTRIES.**

Country.	Infant Mortality Rate.(a)						Crude Birth Rate(b), 1957.
	1921-25.	1926-30.	1931-35.	1936-40.	1956.	1957.	
Sweden .. .. .	60	58	50	42	17	17	14.6
Netherlands .. .. .	64	56	45	37	19	17	21.2
New Zealand(c) .. .. .	43	37	32	32	19	20	25.1
Norway .. .. .	52	49	45	(d) 40	21	(h)	18.2
Australia(e) .. .. .	58	52	41	39	21	21	22.9
Denmark .. .. .	82	82	71	60	25	23	16.7
Switzerland .. .. .	65	54	48	45	26	23	17.7
United Kingdom .. .. .	78	70	65	59	24	24	16.5
United States of America .. .. .	74	68	59	51	26	26	25.0
Finland .. .. .	96	88	72	72	26	28	20.1
Union of South Africa(f) .. .. .	73	67	63	53	31	(h)	25.6
Canada .. .. .	98	93	75	64	32	31	28.2
Ireland, Republic of .. .. .	69	70	68	69	36	33	21.2
France .. .. .	95	89	73	70	36	34	18.5
Belgium .. .. .	100	95	82	77	44	35	17.0
Japan .. .. .	159	137	120	(g) 112	41	40	17.2
Austria .. .. .	136	117	99	81	43	44	17.0
Spain .. .. .	143	124	113	121	46	48	21.7
Italy .. .. .	127	119	105	103	49	50	18.2
Yugoslavia .. .. .	(h)	151	153	(g) 141	98	101	23.5

(a) Number of deaths under one year per 1,000 live births registered.

(b) Number of live births per 1,000 of mean or mid-year population.

(c) Excludes Maoris.

(e) Excludes full-blood aboriginals.

(f) White population only.

(g) 1935-38.

(h) Not available.

(v) *Causes of Death: Children under one Year.* Causes of death of children under one year of age should be considered in relation to age at death, because the emphasis on various causes changes rapidly as age at death varies. In 1957, congenital malformations (12.4 per cent.) and certain diseases of early infancy (84.8 per cent.) accounted for 97.2 per cent. of deaths in the first week of life. These causes accounted for 88.5 per cent. of the deaths in the second, third and fourth weeks of life (38.9 per cent. and 49.6 per cent. respectively). Of the remaining deaths in the first year of life, these causes only accounted for 31.1 per cent. (26.4 per cent. and 4.7 per cent. respectively), the emphasis having shifted to respiratory and digestive diseases (42.3 per cent.), accidents and violence (7.7 per cent.), infective and parasitic diseases (6.7 per cent.) and diseases of the nervous system (6.5 per cent.). A summary for 1957 of deaths of children under one year of age, classified according to principal causes of death and age at death, is given in the following table.

CAUSES OF DEATH: CHILDREN UNDER ONE YEAR OF AGE, AUSTRALIA,  
1957.

Cause of Death.	Age at Death.											Under One Year.				
	Weeks.			Months.												
	Under 1.	1.	2.	3.	1. (a)	2.	3.	4.	5.	6.	7.		8.	9.	10.	11.
Tuberculosis .. .. .	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	2
Septicaemia and pyaemia .. .. .	..	2	..	1	5	2	..	4	3	..	1	2	1	1	3	25
Bacillary dysentery .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
Whooping cough .. .. .	..	..	..	..	2	1	1	2	1	..	..	..	..	..	..	..
Meningococcal infections .. .. .	1	..	..	..	2	1	4	5	4	..	1	..	2	2	2	24
Measles .. .. .	..	..	..	..	..	..	1	1	1	..	..	..	..	1	..	4
Other infective and parasitic diseases .. .. .	1	2	..	..	2	1	1	1	1	1	2	1	..	2	..	14
Neoplasms .. .. .	3	..	1	..	2	4	1	1	1	..	1	3	3	3	3	26
Allergic, endocrine system, etc., diseases .. .. .	3	..	1	1	..	1	..	1	..	1	2	1	2	1	..	14
Diseases of the blood .. .. .	4	..	..	..	..	..	..	1	1	..	..	1	..	..	..	7
Mental, etc., disorders .. .. .	4	2	..	..	4	1	..	2	..	2	..	2	4	..	1	22
Meningitis .. .. .	7	3	4	2	15	2	7	4	7	..	2	5	4	2	3	67
Intracranial and intraspinal abscess .. .. .	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Encephalitis .. .. .	..	..	..	..	..	1	..	1	..	1	..	..	..	..	1	4
Otitis media and mastoiditis .. .. .	..	..	..	1	..	2	..	1	1	..	1	..	1	1	..	8
Other diseases of the nervous system, etc. .. .. .	..	..	..	..	1	3	7	1	1	3	1	3	1	3	..	24
Diseases of the circulatory system .. .. .	..	1	..	..	..	..	1	3	2	1	1	1	1	1	1	13
Pneumonia, age four weeks and over .. .. .	..	..	..	..	51	46	54	37	30	30	15	18	21	7	14	323.
Bronchitis .. .. .	1	..	1	..	3	2	6	3	3	2	2	1	3	3	4	34
Other diseases of the respiratory system .. .. .	4	..	2	1	13	13	11	7	3	7	7	6	3	4	5	86
Hernia and intestinal obstruction .. .. .	21	1	..	1	7	1	1	2	5	2	..	1	4	3	..	49
Gastro-enteritis and colitis, age four weeks and over .. .. .	..	..	..	..	6	8	8	14	6	6	5	13	9	9	6	90
Other diseases of the digestive system .. .. .	6	3	1	1	2	1	2	1	3	1	..	2	1	..	1	25
Diseases of the genito-urinary system .. .. .	..	..	..	1	1	1	3	1	1	..	1	..	..	2	..	11
Diseases of the skin and cellular tissue .. .. .	..	..	2	1	3	..	1	1	..	3	..	1	..	1	..	13
Diseases of the bones and organs of movement .. .. .	1	1	..	..	2	2	..	..	..	..	..	2	1	..	2	11
Congenital malformations .. .. .	370	83	50	27	86	48	57	39	32	27	15	13	9	13	13	882
Certain diseases of early infancy (b)—																
Without mention of immaturity (b)	809	65	39	27	10	8	10	6	8	3	2	1	3	1	2	994
With immaturity (b)	1,710	51	14	8	2	4	1	..	..	..	..	..	..	..	1	1,791
Symptoms and ill-defined conditions .. .. .	12	..	..	..	..	1	1	..	..	..	1	..	1	..	1	17
Accidents, poisonings and violence .. .. .	16	3	3	4	15	16	11	11	7	14	10	5	4	7	3	129
All Causes .. .. .	2,973	217	118	76	234	171	188	149	123	104	71	81	79	67	66	4,717

(a) Age four weeks and under two months.

(b) For further detail of this group of causes see next table.

The individual categories representing the causes of death which come within Class XV.—Certain Diseases of Early Infancy are designed to show the effect of immaturity in such causes of infant death. In 1957, 68 per cent. of deaths in this class during the first week of life and 35 per cent. of those in the next three weeks of life were due, directly or indirectly, to immaturity. The relationship between immaturity and each of the individual categories of Class XV. is shown for the year 1957 in the following table.

**DEATHS OF CHILDREN UNDER ONE YEAR OF AGE FROM CERTAIN DISEASES  
OF EARLY INFANCY : AUSTRALIA, 1957.**

Category No.	Cause of Death.	Without Mention of Immaturity.			With Immaturity.			Total.		
		Males.	Fe-males.	Per-sons.	Males.	Fe-males.	Per-sons.	Males.	Fe-males.	Per-sons.
760	Intracranial and spinal injury at birth ..	185	108	293	90	71	161	275	179	454
761	Other birth injury ..	64	39	103	96	71	167	160	110	270
762	Post-natal asphyxia and atelectasis ..	121	107	228	161	107	268	282	214	496
763	Pneumonia of the newborn ..	67	44	111	14	15	29	81	59	140
764	Diarrhoea of the newborn ..	6	2	8	..	..	1	6	3	9
765	Ophthalmia neonatorum ..	..	..	..	..	..	..	..	..	..
766	Pemphigus neonatorum ..	..	..	..	..	..	..	..	..	..
767	Umbilical sepsis ..	4	4	8	..	..	..	4	4	8
768	Other sepsis of newborn ..	10	8	18	..	..	..	10	8	18
769	Neonatal disorders arising from maternal toxæmia ..	16	13	29	34	27	61	50	40	90
770	Haemolytic disease of newborn (erythroblastosis) ..	61	45	106	14	16	30	75	61	136
771	Haemorrhagic disease of newborn ..	22	17	39	6	4	10	28	21	49
772	Nutritional maladjustment ..	11	7	18	..	1	1	11	8	19
773	Ill-defined diseases peculiar to early infancy ..	21	12	33	30	28	58	51	40	91
774	Immaturity with mention of any other subsidiary condition ..	..	..	..	18	5	23	18	5	23
775	Immaturity subsidiary to some other cause ..	..	..	..	..	..	..	..	..	..
776	Immaturity unqualified ..	..	..	..	569	413	982	569	413	982
	<b>Total, Class XV.</b> ..	<b>588</b>	<b>406</b>	<b>994</b>	<b>1,032</b>	<b>759</b>	<b>1,791</b>	<b>1,620</b>	<b>1,165</b>	<b>2,785</b>

(vi) *Deaths of Ex-nuptial Children under one Year of Age.* Distinction between nuptial and ex-nuptial children in death statistics for Australia as a whole has been made since 1925. Results show that death rates during infancy were higher for ex-nuptial children than for nuptial children, but in recent years there has been no significant difference.

Detailed information for Australia as to the age at which ex-nuptial children died from each cause of death will be found in the annual bulletin, *Demography*. Because of the small number of ex-nuptial deaths involved in each case, it is difficult to assess the real significance of the differences between the numbers of nuptial and ex-nuptial deaths from each individual cause.

9. *Age Distribution.*—(i) *Number of Deaths.* Age at death is recorded for statistical purposes in days for the first week of life, in weeks for the first four weeks, in months for the first two years and in completed years of life thereafter. These ages are usually combined in groups for publication, the most common being weeks for the first four weeks, months or groups of months for the first year, single years of age for the first five years and thereafter the five-year groups 5-9 years, 10-14 years, etc. A summary in this form for Australia is given in the following table for the year 1957.

**AGE AT DEATH : AUSTRALIA, 1957.**

Age at Death.	Males.	Fe-males.	Per-sons.	Age at Death.	Males.	Fe-males.	Per-sons.
Under 1 week ..	1,706	1,267	2,973	5-9 years ..	293	188	481
1 week and under 2 weeks ..	142	75	217	10-14 ..	237	152	389
2 weeks and under 3 weeks ..	64	54	118	15-19 ..	492	179	671
3 weeks and under 4 weeks ..	41	35	76	20-24 ..	568	186	754
				25-29 ..	602	264	866
<b>Total under 4 weeks ..</b>	<b>1,953</b>	<b>1,431</b>	<b>3,384</b>	30-34 ..	771	393	1,164
				35-39 ..	828	535	1,363
4 weeks and under 3 months ..	242	163	405	40-44 ..	1,176	804	1,980
3 months and under 6 ..	238	222	460	45-49 ..	1,818	1,098	2,916
6 months and under 12 ..	260	208	468	50-54 ..	2,609	1,316	3,925
				55-59 ..	3,662	1,924	5,586
<b>Total under 1 year ..</b>	<b>2,693</b>	<b>2,024</b>	<b>4,717</b>	60-64 ..	4,709	2,803	7,512
				65-69 ..	6,365	4,141	10,506
1 year ..	268	222	490	70-74 ..	6,640	5,046	11,686
2 years ..	162	124	286	75-79 ..	5,879	5,539	11,418
3 ..	103	77	180	80-84 ..	4,080	5,046	9,126
4 ..	94	47	141	85-89 ..	2,511	3,453	5,964
				90-94 ..	874	1,401	2,275
				95-99 ..	180	290	470
				100 years and over ..	21	30	51
				Age not stated ..	24	12	36
<b>Total under 5 years ..</b>	<b>3,320</b>	<b>2,494</b>	<b>5,814</b>	<b>Total, All Ages ..</b>	<b>47,659</b>	<b>37,294</b>	<b>84,953</b>

There are different mortality rates at various stages of life and the actual number of deaths in any period depends upon the impact of these rates on the numbers living at the respective stages. Changes in the number of deaths from one period to another are caused by changes in the rate of mortality in the various age groups and by the changed proportions of persons living in the different groups.

In Australia, during the last fifty years, there has been a steady decline in the rate of mortality at all ages. This has been most pronounced at ages under one year. The increased length of life due to this factor coupled with the long-term decline in the birth rate and the effects of past and present migration, has been a significant cause in changing the age distribution of the population and consequently the age distribution of deaths, thus obscuring the effects of declining mortality rates.

The combined effect of these various influences can be seen from the following table which shows the proportion of deaths in various age groups in ten-year periods from 1901 to 1950 and for the year 1957.

PROPORTION OF DEATHS IN EACH AGE GROUP : AUSTRALIA.  
(Per Cent.)

Period.	Age at Death (Years).								Total.
	Under 1.	1-4.	5-19.	20-39.	40-59.	60-64.	65 and over.	Unspeci- fied.	
1901-10 ..	20.51	6.45	6.37	14.99	17.99	5.31	28.26	0.12	100.00
1911-20 ..	16.66	6.09	5.49	14.44	20.32	6.19	30.68	0.13	100.00
1921-30 ..	13.10	4.51	4.85	12.12	20.55	8.26	36.53	0.08	100.00
1931-40 ..	7.40	2.56	3.83	9.36	20.54	8.36	47.92	0.03	100.00
1941-50 ..	6.79	1.71	2.26	6.01	19.04	9.33	54.84	0.02	100.00
1957—									
Males ..	5.65	1.32	2.14	5.81	19.44	9.88	55.71	0.05	100.00
Females ..	5.43	1.26	1.39	3.69	13.79	7.52	66.89	0.03	100.00
Persons ..	5.55	1.29	1.82	4.88	16.96	8.84	60.62	0.04	100.00

A table showing these proportions for males and females separately for the period 1901 to 1950 was published in Official Year Book No. 39, page 614.

(ii) *Age-specific Death Rates.* In previous issues of the Official Year Book, average annual age-specific death rates were given for each State and Australia for the periods 1932-34, 1946-48 and 1953-55 (*see* Official Year Books, No. 37, page 778; No. 39, pages 615-6 and No. 44, pages 640-1). These rates were based on the age distribution of the population at the relevant censuses.

Intercensal estimates of the age distribution of the population are available only for Australia as a whole and not for the individual States. As a consequence age specific death rates for States are not available. The following table shows age-specific death rates for Australia for the years 1955, 1956 and 1957.

## AGE-SPECIFIC DEATH RATES(a): AUSTRALIA.

Age Group (Years).	1955.	1956.	1957.	Age Group (Years).	1955.	1956.	1957.
0-4 ..	5.83	5.67	5.71	50-54 ..	8.11	8.01	7.85
5-9 ..	0.53	0.46	0.49	55-59 ..	12.81	12.93	12.68
10-14 ..	0.48	0.47	0.46	60-64 ..	20.19	20.63	20.16
15-19 ..	1.05	0.91	1.01	65-69 ..	32.39	32.13	31.58
20-24 ..	1.20	1.29	1.23	70-74 ..	51.69	53.02	51.24
25-29 ..	1.18	1.21	1.25	75-79 ..	78.96	83.16	78.21
30-34 ..	1.46	1.45	1.56	80-84 ..	131.79	139.94	129.84
35-39 ..	1.93	1.96	1.97	85-89 ..	198.78	215.14	202.55
40-44 ..	3.01	3.02	2.99	90 and over ..	308.97	337.91	324.21
45-49 ..	5.00	4.97	4.85				

(a) Average number of deaths per 1,000 of population in each age group.

10. Causes of Death.—The classification of causes of death adopted for Australia by the Commonwealth Bureau of Census and Statistics at the inception of its mortality statistics in 1907 was that introduced by the International Institute of Statistics in 1893, reviewed by that Institute in 1899 and revised by an International Commission in 1900. This classification became known as the International List of Causes of Death and further international revisions in 1909 (Second), 1920 (Third), 1929 (Fourth), 1938 (Fifth) and 1948 (Sixth) were successively adapted for use in Australian statistics.

The Sixth Revision of the International Statistical Classification of Diseases, Injuries and Causes of Death has been used in Australia since 1950. For the first time in connexion with the International List, international rules were laid down for a uniform method of selecting the main cause to be tabulated, if more than one cause is stated on the death certificate. Prior to 1950, the rules adopted in Australia for the selection of the cause of death to be tabulated were those laid down in the United States Manual of Joint Causes of Death, first published in 1914 and revised to conform with successive revisions of the International List.

The adoption of the new method marked a fundamental change in Australian cause of death statistics, with emphasis now placed on the underlying cause of death as indicated by the certifying practitioner. The introduction of this method required the adoption by all States of a form of medical certificate substantially identical with the International Form of Medical Certificate of Cause of Death as laid down in Article 9 of the World Health Organization Regulations No. 1. By 1950, all States had adopted satisfactory forms of certificate and it was possible to apply the new principles uniformly to all State cause of death records.

This change in principle affects the comparability of the statistics for 1950 and subsequent years with those for earlier years. For convenience in assessing the extent of the change and in accordance with a recommendation of the Sixth Decennial Revision Conference, causes of death for Australia for 1950 were also classified according to the detailed classification of the Fifth Revision, 1938, on the joint cause rules current for that revision. A complete detailed classification according to both the Fifth and Sixth Revisions was shown in *Demography*, Bulletin No. 68. Commencing with 1951, the classification is according to the Sixth Revision only.

In order to facilitate the briefer presentation of cause of death statistics, the present International Classification provides two special lists of causes for tabulation—the Intermediate List of 150 causes and the Abbreviated List of 50 causes. The latter has been used for the cause of death tabulations A to C which follow. Tables A and B show deaths of males and females, respectively, for 1957 and Table C shows the numbers of persons who died and the death rates and proportion per 10,000 deaths for the years 1956 and 1957.

## A.—CAUSES OF DEATH : MALES, 1957.

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SIXTH REVISION OF THE INTERNATIONAL LIST).

Cause of Death.	Detailed List Numbers.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
B 1 Tuberculosis of respiratory system	001-008	186	97	74	27	28	13	4	..	429
B 2 Tuberculosis, other forms	010-019	10	9	1	5	..	1	..	..	27
B 3 Syphilis and its sequelae	020-029	38	44	19	13	9	3	..	1	126
B 4 Typhoid fever	040	..	..	..	..	..	..	..	..	..
B 5 Cholera	043	..	..	..	..	..	..	..	..	..
B 6 Dysentery, all forms	045-048	3	1	1	1	..	..	..	..	6
B 7 Scarlet fever and streptococcal sore throat	050, 051	2	1	..	..	..	..	..	..	3
B 8 Diphtheria	055	2	1	..	..	1	..	..	..	4
B 9 Whooping cough	056	1	..	1	..	..	..	..	..	2
B10 Meningococcal infections	057	17	9	5	2	2	3	..	..	38
B11 Plague	058	..	..	..	..	..	..	..	..	..
B12 Acute poliomyelitis	080	3	..	1	..	..	1	..	..	5
B13 Smallpox	084	..	..	..	..	..	..	..	..	..
B14 Measles	085	3	4	..	1	1	1	..	..	10
B15 Typhus and other rickettsial diseases	100-108	..	..	..	..	..	..	..	..	..
B16 Malaria	110-117	..	1	..	..	..	..	..	..	1
B17 All other diseases classified as infective and parasitic	(a)	75	41	28	16	11	6	1	2	180
B18 Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues	140-205	2,611	1,934	997	537	494	213	3	12	6,801
B19 Benign and unspecified neoplasms	210-239	50	30	12	11	5	3	1	..	112
B20 Diabetes mellitus	260	129	176	45	30	19	20	1	1	421
B21 Anaemias	290-293	33	33	15	5	4	2	..	..	92
B22 Vascular lesions affecting central nervous system	330-334	2,128	1,323	703	451	253	163	5	11	5,037
B23 Non-meningococcal meningitis	340	34	17	7	2	7	3	1	..	81
B24 Rheumatic fever	400-402	9	18	6	4	2	1	..	..	40
B25 Chronic rheumatic heart disease	410-416	116	96	64	38	13	7	..	..	335
B26 Arteriosclerotic and degenerative heart disease	420-422	5,575	3,830	1,756	1,223	957	387	9	28	13,765
B27 Other diseases of heart	430-434	642	330	241	109	19	49	2	3	1,395
B28 Hypertension with heart disease	440-443	394	257	164	54	78	31	..	1	979
B29 Hypertension without mention of heart	444-447	205	152	75	40	28	12	..	..	513
B30 Influenza	480-483	69	111	32	21	32	10	..	..	275
B31 Pneumonia	490-493	776	360	241	212	117	73	3	2	1,784
B32 Bronchitis	500-502	292	249	90	45	52	33	1	1	763
B33 Ulcer of stomach and duodenum	540, 541	223	132	75	45	35	12	1	4	527
B34 Appendicitis	550-553	35	22	17	8	9	4	2	1	98
B35 Intestinal obstruction and hernia	560, 561, 570	111	64	51	31	19	8	..	1	285
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	543, 571, 572	78	44	37	21	12	2	2	..	196
B37 Cirrhosis of liver	581	92	91	37	33	12	4	..	..	271
B38 Nephritis and nephrosis	590-594	243	146	155	53	44	24	2	2	669
B39 Hyperplasia of prostate	610	153	188	73	53	57	31	..	1	556
B41 Congenital malformations	750-759	214	179	94	64	48	23	2	3	627
B42 Birth injuries, post-natal asphyxia and atelectasis	760-762	252	222	98	63	52	23	7	..	717
B43 Infections of the newborn	763-768	47	24	16	6	6	1	..	1	101
B44 Other diseases peculiar to early infancy, and immaturity unqualified	769-776	341	165	132	58	68	37	1	1	803
B45 Senility without mention of psychosis, ill-defined and unknown causes	780-795	231	108	121	49	12	10	4	..	535
B46 All other diseases	Residual	1,484	1,343	661	332	276	140	7	8	4,251
BE47 Motor vehicle accidents	E810-E835	657	527	274	178	123	52	8	4	1,823
BE48 All other accidents	E800-E802, E840-E962	785	537	323	166	144	74	12	7	2,048
BE49 Suicide and self-inflicted injury	E963, E970-E979	336	155	153	87	73	33	4	3	844
BE50 Homicide and operations of war	E964, E965, E980-E999	49	13	8	7	4	1	2	..	84
All Causes	..	18,734	13,084	6,913	4,101	3,126	1,514	85	102	47,659

(a) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

**B.—CAUSES OF DEATH : FEMALES, 1957.**  
 ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SIXTH REVISION OF THE  
 INTERNATIONAL LIST).

Cause of Death.	Detailed List Numbers.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
B 1 Tuberculosis of respiratory system ..	001-008	46	36	14	8	7	2	..	1	114
B 2 Tuberculosis, other forms ..	010-019	6	3	3	2	1	..	..	..	15
B 3 Syphilis and its sequelae ..	020-029	9	9	5	3	1	1	..	..	28
B 4 Typhoid fever ..	040	..	..	..	..	..	..	..	..	..
B 5 Cholera ..	043	..	..	..	..	..	..	..	..	..
B 6 Dysentery, all forms ..	045-048	1	..	3	1	..	1	..	..	6
B 7 Scarlet fever and streptococcal sore throat ..	050, 051	..	..	..	..	..	..	..	..	..
B 8 Diphtheria ..	055	1	1	1	1	..	1	..	..	5
B 9 Whooping cough ..	056	2	..	3	..	..	..	..	..	5
B10 Meningococcal infections ..	057	9	6	1	2	3	2	..	..	23
B11 Plague ..	058	..	..	..	..	..	..	..	..	..
B12 Acute poliomyelitis ..	080	2	..	..	..	1	..	..	..	3
B13 Smallpox ..	084	..	..	..	..	..	..	..	..	..
B14 Measles ..	085	2	3	..	..	..	..	..	..	5
B15 Typhus and other rickettsial diseases ..	100-108	1	..	..	..	..	..	..	..	1
B16 Malaria ..	110-117	..	..	..	..	..	..	..	..	..
B17 All other diseases classified as infective and parasitic ..	(a)	57	36	12	12	10	2	1	1	131
B18 Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues ..	140-205	2,234	1,811	728	592	325	173	1	14	5,878
B19 Benign and unspecified neoplasms ..	210-239	56	43	19	12	6	2	..	..	138
B20 Diabetes mellitus ..	260	266	271	71	46	47	29	..	..	730
B21 Anaemias ..	290-293	77	68	31	16	7	8	..	1	208
B22 Vascular lesions affecting central nervous system ..	330-334	2,652	1,862	772	584	341	214	3	12	6,440
B23 Non-meningococcal meningitis ..	340	13	14	11	8	7	1	..	..	54
B24 Rheumatic fever ..	400-402	5	6	4	1	2	..	..	..	18
B25 Chronic rheumatic heart disease ..	410-416	127	147	51	49	28	10	..	1	413
B26 Arteriosclerotic and degenerative heart disease ..	420-422	3,711	2,652	939	903	565	265	1	12	9,048
B27 Other diseases of heart ..	430-434	488	310	151	87	30	40	2	2	1,110
B28 Hypertension with heart disease ..	440-443	454	311	164	80	75	24	..	..	1,108
B29 Hypertension without mention of heart ..	444-447	208	165	91	38	33	25	1	..	561
B30 Influenza ..	480-483	47	66	19	17	11	8	2	..	170
B31 Pneumonia ..	490-493	591	343	189	189	92	53	3	1	1,461
B32 Bronchitis ..	500-502	77	61	35	17	10	10	..	3	213
B33 Ulcer of stomach and duodenum ..	540, 541	85	52	24	10	9	3	..	..	183
B34 Appendicitis ..	550-553	24	8	9	3	7	6	..	..	57
B35 Intestinal obstruction and hernia ..	560, 561, 570	108	45	41	23	12	5	..	3	237
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn ..	543, 571, 572	79	55	28	27	16	3	3	1	212
B37 Cirrhosis of liver ..	581	49	53	20	21	15	5	..	1	164
B38 Nephritis and nephrosis ..	590-594	235	134	124	31	27	19	..	..	570
B40 Complications of pregnancy, childbirth and the puerperium ..	{ 640-652, 670-689 }	64	27	21	12	11	2	..	1	138
B41 Congenital malformations ..	750-759	182	174	75	53	38	26	1	..	549
B42 Birth injuries, post-natal asphyxia and atelectasis ..	760-762	161	179	67	39	40	16	1	1	504
B43 Infections of the newborn ..	763-768	25	19	16	8	3	2	..	1	74
B44 Other diseases peculiar to early infancy, and immaturity unqualified ..	769-776	252	131	102	45	42	14	2	1	589
B45 Senility without mention of psychosis, ill-defined and unknown causes ..	780-795	306	98	110	70	17	12	..	2	615
B46 All other diseases ..	Residual	1,224	1,303	530	270	219	114	3	4	3,667
BE47 Motor vehicle accidents ..	E810-E835	172	140	53	53	32	17	..	3	470
BE48 All other accidents ..	{ E800-E802, E840-E962 }	323	314	170	106	51	34	6	..	1,004
BE49 Suicide and self-inflicted injury ..	{ E963, E970-E979 }	135	85	46	31	22	7	..	..	326
BE50 Homicide and operations of war ..	{ E964, E965, E980-E999 }	17	6	13	5	8	..	..	..	49
All Causes ..	..	14,583	11,047	4,766	3,475	2,171	1,156	30	66	37,294

(a) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

## C.—CAUSES OF DEATH : PERSONS, AUSTRALIA.

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SIXTH REVISION OF THE INTERNATIONAL LIST).

Cause of Death.	Detailed List Numbers.	Number of Deaths.		Rate per 1,000,000 of Mean Population.		Proportion per 10,000 Deaths.	
		1956.	1957.	1956.	1957.	1956.	1957.
		B 1 Tuberculosis of respiratory system	001-008	663	543	70	56
B 2 Tuberculosis, other forms	010-019	61	42	7	4	7	5
B 3 Syphilis and its sequelae	020-029	174	154	18	16	20	18
B 4 Typhoid fever	040	2	..	..	..	..	..
B 5 Cholera	043	..	..	..	..	..	..
B 6 Dysentery, all forms	045-048	15	12	2	1	2	1
B 7 Scarlet fever and streptococcal sore throat	050, 051	9	3	1	1	1	1
B 8 Diphtheria	055	12	9	1	1	1	1
B 9 Whooping cough	056	10	7	1	1	1	1
B10 Meningococcal infections	057	66	61	7	6	8	7
B11 Plague	058	..	..	..	..	..	..
B12 Acute poliomyelitis	080	57	8	6	1	7	1
B13 Smallpox	084	..	..	..	..	..	..
B14 Measles	085	44	15	5	2	5	2
B15 Typhus and other rickettsial diseases	100-108	1	1	..	..	..	..
B16 Malaria	110-117	2	1	..	..	..	..
B17 All other diseases classified as infective and parasitic	(a)	329	311	35	32	38	37
B18 Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues	140-205	12,281	12,679	1,303	1,315	1,427	1,493
B19 Benign and unspecified neoplasms	210-239	264	250	28	26	31	29
B20 Diabetes mellitus	260	1,212	1,151	129	119	141	136
B21 Anaemias	290-293	336	300	36	31	39	35
B22 Vascular lesions affecting central nervous system	330-334	11,562	11,477	1,226	1,191	1,343	1,351
B23 Non-meningococcal meningitis	340	133	135	14	14	15	16
B24 Rheumatic fever	400-402	53	58	6	6	6	7
B25 Chronic rheumatic heart disease	410-416	782	748	83	78	91	88
B26 Arteriosclerotic and degenerative heart disease	420-422	23,913	22,813	2,537	2,366	2,778	2,685
B27 Other diseases of heart	430-434	2,634	2,505	279	260	306	295
B28 Hypertension with heart disease	440-443	2,190	2,087	232	217	254	246
B29 Hypertension without mention of heart	444-447	1,201	1,074	127	112	139	126
B30 Influenza	480-483	182	445	19	46	21	52
B31 Pneumonia	490-493	3,108	3,245	330	337	361	382
B32 Bronchitis	500-502	1,055	976	112	101	123	115
B33 Ulcer of stomach and duodenum	540, 541	687	710	73	74	80	84
B34 Appendicitis	550-553	155	155	16	16	18	18
B35 Intestinal obstruction and hernia	560, 561, 570	516	522	55	54	60	61
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	543, 571, 572	414	408	44	42	48	48
B37 Cirrhosis of liver	581	470	435	50	45	55	51
B38 Nephritis and nephrosis	590-594	1,291	1,239	137	129	150	146
B39 Hyperplasia of prostate	610	543	556	58	58	63	66
B40 Complications of pregnancy, child birth and the puerperium	{ 640-652, 670-689 }	119	138	13	14	14	16
B41 Congenital malformations	750-759	1,172	1,176	124	122	136	138
B42 Birth injuries, post-natal asphyxia and atelectasis	760-762	1,084	1,221	115	127	126	144
B43 Infections of the newborn	763-768	167	175	18	18	19	21
B44 Other diseases peculiar to early infancy, and immaturity unqualified	769-776	1,490	1,392	158	144	173	164
B45 Senility without mention of psychosis, ill-defined and unknown causes	780-795	1,285	1,150	136	119	149	135
B46 All other diseases	Residual	8,021	7,918	851	821	932	932
BE47 Motor vehicle accidents	E810-E835	2,219	2,293	235	238	258	270
BE48 All other accidents	{ E800-E802, E840-E962 }	2,948	3,052	313	317	342	359
BE49 Suicide and self-inflicted injury	{ E963, E970-E979 }	1,021	1,170	108	121	119	138
BE50 Homicide and operations of war	{ E964, E965, E980-E999 }	135	133	14	14	16	16
All Causes	..	86,088	84,953	9,132	8,812	10,000	10,000

(a) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

11. **Deaths from Principal Causes.**—(i) *General.* In the preceding tables, particulars have been given for each of the causes of death comprising the Abbreviated Classification according to the Sixth Revision of the International List. Certain important causes are treated in detail hereunder. The Abbreviated Classification numbers used in tables A to C (pp. 357-9) are indicated in parentheses for each cause or group of causes.

(ii) *All Forms of Tuberculosis (B1, B2).* (a) *General.* The total number of deaths classified to all forms of tuberculosis in 1957 was 585, consisting of 456 males and 129 females. In comparing any of the figures for 1950 and subsequent years with those for 1949 and earlier years, consideration should be given to the effect of the change in basis from the Fifth to the Sixth Revision of the International List. This was discussed in Official Year Book No. 39, page 626.

(b) *Age at Death.* The following table shows the age groups of males and females who were classified as dying from tuberculosis in 1957, together with figures for 1921, 1931, 1941 and 1951.

**TUBERCULOSIS (ALL FORMS) : DEATHS IN AGE GROUPS, AUSTRALIA.**

Age Group (Years).	Males.					Females.				
	1921.	1931.	1941.	1951.	1957.	1921.	1931.	1941.	1951.	1957.
0-14 .. ..	143	90	63	23	2	128	81	54	35	3
15-29 .. ..	477	294	162	46	10	540	487	275	68	11
30-44 .. ..	718	585	428	135	46	514	422	319	142	38
45-64 .. ..	692	674	793	570	199	278	252	251	126	29
65 and over ..	138	193	279	306	199	56	89	110	86	48
Not stated ..	3	..	..	..	..	..	..	..	1	..
<b>Total ..</b>	<b>2,171</b>	<b>1,836</b>	<b>1,725</b>	<b>1,080</b>	<b>456</b>	<b>1,516</b>	<b>1,331</b>	<b>1,009</b>	<b>458</b>	<b>129</b>

(c) *Death Rates.* The reduction in mortality from tuberculosis is shown by the decline in the crude death rate from tubercular diseases, which fell from 68 per 100,000 of mean population in 1921 (males, 78; females, 56) to 18 in 1951 (males, 25; females, 11) and still further to 6 in 1957 (males 9; females, 3). The crude death rate does not reveal the even more striking fall in the number of deaths in the younger age groups, which can be seen from the table above.

(d) *Death Rates, Various Countries.* A comparison of the death rates from tuberculosis for Australia with those for various other countries, made on the latest figures available, shows that Australia, with a rate of 6 deaths per 100,000 of mean population, occupies a favourable position as regards this disease. Whereas the rate for Denmark is only 5, rates range as high as 63 for Portugal. For various other countries rates are as follows:—Netherlands, 6; Canada, 8; New Zealand, 11; Union of South Africa and United States of America, 9; United Kingdom, 12; Switzerland, 22; Italy, 23; France, 29; Finland, 38; and Japan, 49.

(iii) *Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues (B18).* (a) *General.* It was shown in Official Year Book No. 39, page 628, that deaths classified under this heading according to the Sixth Revision of the International List are not directly comparable in total with those on the Fifth Revision basis and comparability ratios were given to enable comparison to be made on an adjusted basis. This change must be kept in mind in considering the comparisons shown in the following pages.

(b) *Type and Seat of Disease.* Tables showing the type and seat of disease in conjunction with age and conjugal condition of the persons dying from malignant neoplasms in 1957 will be found in *Demography*, Bulletin No. 75. A summary regarding type and seat of disease for 1957 is given below. It may be pointed out that the significance of the number of deaths shown for the various types of neoplasms enumerated hereunder is doubtful, owing to the fact that, in the absence of a post-mortem, it is impracticable for the certifying doctor in the majority of cases to make an accurate diagnosis as to type in the detail required for the following classification.

**DEATHS FROM MALIGNANT NEOPLASMS AND NEOPLASMS OF LYMPHATIC AND HAEMATOPOIETIC TISSUES: TYPE AND SEAT OF DISEASE, AUSTRALIA, 1957.**

Type of Disease.	Males.	Females.	Persons.	Seat of Disease.	Males.	Females.	Persons.
Malignant Neoplasms—				Malignant Neoplasms—			
Cancer and carcinoma (other than skin) ..	5,596	5,018	10,614	Buccal cavity and pharynx ..	190	63	253
Skin cancer ..	33	28	61	Digestive organs and peritoneum—			
Sarcoma and myeloid sarcoma ..	114	93	207	Oesophagus ..	134	81	215
Myeloma ..				Stomach ..	1,081	695	1,776
Glioma ..	122	72	194	Small intestine ..	12	15	27
Endothelioma ..				Large intestine ..	656	807	1,463
Melanoma and melanotic sarcoma ..	129	96	225	Other ..	904	731	1,635
Hypernephroma ..	30	12	42	Respiratory system ..	1,350	221	1,571
Teratoma ..	15	1	16	Breast ..	10	1,086	1,096
Malignant disease and malignant tumor, n.o.s.	201	145	346	Uterus ..		631	631
				Other female genital organs ..		420	420
<i>Total, Malignant Neoplasms</i> ..	<i>6,240</i>	<i>5,465</i>	<i>11,705</i>	Male genital organs ..	808		808
				Urinary organs ..	360	160	520
				Skin ..			
				Other and unspecified organs ..	735	555	1,290
				<i>Total, Malignant Neoplasms</i> ..	<i>6,240</i>	<i>5,465</i>	<i>11,705</i>
Neoplasms of Lymphatic and Haematopoietic Tissues—				<i>Neoplasms of Lymphatic and Haematopoietic Tissues</i> ..	<i>561</i>	<i>413</i>	<i>974</i>
Lymphosarcoma and reticulosarcoma ..	135	108	243				
Hodgkin's disease ..	92	45	137				
Other forms of lymphoma (reticulos) ..	16	12	28				
Multiple myeloma (plasmocytoma) ..	42	28	70				
Leukaemia and aleukaemia ..	272	219	491				
Mycosis fungoides ..	4	1	5				
<i>Total, Neoplasms of Lymphatic, etc., Tissues</i> ..	<i>561</i>	<i>413</i>	<i>974</i>				
<b>Grand Total</b> ..	<b>6,801</b>	<b>5,878</b>	<b>12,679</b>	<b>Grand Total</b> ..	<b>6,801</b>	<b>5,878</b>	<b>12,679</b>

(c) *Age at Death.* The ages of males and females who died from malignant neoplasms in 1957 are given below, together with figures for 1921, 1931, 1941 and 1951. The increase in the number of deaths from malignant neoplasms in the years since 1921 is principally due to the increase in the number of people in the higher age groups, at which ages the risks of cancer are much greater. While the total population increased by about 77 per cent. between 1921 and 1957, the number of people over 55 years of age increased by about 158 per cent. The increase in the number of deaths in the lower age groups from 1951 is partly due to the inclusion of neoplasms of lymphatic and haematopoietic tissues, also it is probable that a proportion of the increased number of deaths from cancer recorded in recent years has been due to improved diagnosis and certification on the part of the medical profession.

**MALIGNANT NEOPLASMS<sup>(a)</sup>: NUMBER OF DEATHS IN AGE GROUPS, AUSTRALIA.**

Age Group (Years).	Males.					Females.				
	1921.	1931.	1941.	1951. (a)	1957. (a)	1921.	1931.	1941.	1951. (a)	1957. (a)
Under 15 ..	26	25	21	91	136	23	23	25	71	86
15-29 ..	29	43	49	103	122	37	38	45	76	87
30-44 ..	163	196	176	275	355	266	326	344	387	459
45-54 ..	387	410	465	584	759	470	548	685	692	722
55-64 ..	800	868	983	1,334	1,551	657	744	926	1,180	1,278
65 and over ..	1,032	1,942	2,561	3,128	3,878	875	1,426	2,198	2,698	3,245
Not stated ..	3									
<b>Total</b> ..	<b>2,440</b>	<b>3,484</b>	<b>4,255</b>	<b>5,515</b>	<b>6,801</b>	<b>2,328</b>	<b>3,105</b>	<b>4,223</b>	<b>5,104</b>	<b>5,878</b>

(a) Includes neoplasms of lymphatic and haematopoietic tissues.

(d) *Death Rates.* The death rates from malignant neoplasms have continued to rise over recent years. The rates are crude death rates representing the number of deaths from malignant neoplasms per 100,000 of mean population and do not take account of changes in the age constitution of the population, and to a substantial extent reflect the increasing age of the population rather than the true change in mortality from malignant neoplasms (see previous paragraph). In 1921, the rate for Australia was 87 (males, 88; females, 87); in 1931 it was 101 (males, 105; females, 97); in 1941 it was 119 (males, 119; females, 120) and in 1951 it had risen to 126 (males, 129; females, 122). Figures for 1957 show that a further rise has taken place, the rate being 132 (males, 139; females, 124).

(e) *Death Rates, Various Countries.* Death rates from malignant neoplasms per 100,000 of mean population for Australia and for various other countries are as follows:—Portugal, 84; Japan, 91; Italy, 128; Canada, 130; Union of South Africa, 131; Australia, 132; Finland, 146; United States of America, 147; New Zealand, 154; Netherlands, 158; France, 183; Switzerland, 190, and United Kingdom, 208. The rates are for the latest available year in each case.

(iv) *Diseases of the Heart (B25 to B28).* The number of deaths classified to diseases of the heart in 1957 was 28,153 (16,474 males and 11,679 females). This class is the largest amongst causes of death, the rate having increased from 112 per 100,000 of mean population in 1911–15 to 292 in 1957. The increase in the number of deaths recorded from heart diseases has been particularly pronounced during the past twenty years. The rapid increase in mortality is partly a reflection of the ageing of the population, but the figures have been influenced mainly by improved diagnosis and certification by medical practitioners.

The death rates for heart diseases for various years from 1921 were as follows:—1921, 93 (males, 102; females, 83); 1931, 159 (males, 178; females, 142); 1941, 269 (males, 306; females, 231); 1951, 314 (males, 367; females, 259); and 1957, 292 (males, 337; females, 246). Deaths from heart diseases in 1957 represented 33 per cent. of the total deaths.

(v) *Puerperal Causes (B 40).* It was shown in Official Year Book No. 39, page 634, that the changes introduced with the Sixth Revision of the International List did not significantly affect the comparability of the total number of deaths from puerperal causes. The death rate from these causes (including criminal abortion) has fallen rapidly during recent years and in 1957 the rate was 0.6 per 1,000 live births, compared with a rate of 6 per 1,000 in 1936. The 138 deaths in 1957 correspond to a death rate of 2.9 per 100,000 females. The death rate may be expressed in other terms by stating that 1 of every 1,579 women giving birth to a live child in 1957 died from puerperal causes; the corresponding ratios for married women were 1 in every 1,669, and for single women 1 in every 712.

The death rate per 1,000 live births from puerperal causes in various countries for the latest available years is as follows:—New Zealand and Denmark, 0.4; United States of America, 0.5; France, United Kingdom and the Netherlands, 0.6; Canada, 0.8; Finland and Switzerland, 1.0; South Africa, 1.2; Italy, 1.3; and Japan, 1.8.

The total number of children left by the 125 married mothers who died from puerperal causes in 1957 was 323, an average of 2.5 children per mother.

One of the mothers who died had been married less than one year, 11 between one and two years, and 6 between two and three years. The duration of marriage ranged up to 28 years. Tabulations distinguishing the ages at marriage and at death will be found in *Demography*, Bulletin No. 75, which also includes a table showing in combination the duration of marriage and previous issue.

(vi) *Congenital Malformations and Diseases of Early Infancy (B 41 to B 44).* This combined group embraces two complete classes of the International List of Causes of Death which relate more specifically to infant deaths and they have already been presented in detail in the section devoted to causes of infant death (see pp. 353 and 354).

(vii) *Accidents, Poisonings and Violence (BE 47 to BE 50)*. (a) *General*. Deaths in this class are classified according to external cause and not according to nature of injury. The classification provides sub-groups for accidents, including adverse reactions to prophylactic inoculations, therapeutic misadventures and late effects of accidental injury; suicide; homicide and injuries purposely inflicted by other persons; and injury resulting from operations of war, including late effects.

The following table, showing the death rates in the main sub-groups per 100,000 of mean population, indicates that the death rate from violence is generally about three times as great for males as for females. It can be seen also that in 1957 the proportion of deaths caused by violence was 7.83 per cent., compared with 6.76 per cent. in 1931-35.

The low level of the rates and proportions for the years 1941-45 is due largely to the exclusion of deaths of defence personnel from accidents, suicide and homicide, though the rates have been based on total mean population (including defence personnel). A further contributing factor is the decrease during this period in the number of automobile accidents. From July, 1947, deaths of defence personnel from accidents, etc., have again been included.

**ACCIDENTS, POISONINGS AND VIOLENCE : DEATH RATES.(a)**

Period.	Death Rate(a) from—												All Violence. Proportion per 10,000 Deaths.		
	Accidents.(b)			Suicide.			Homicide.(c)			Total Violence.					
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
1931-35..	71	22	47	19	5	12	2	1	2	92	28	61	929	353	676
1936-40..	86	28	58	17	5	11	2	1	1	105	34	70	979	399	724
1941-45..	67	26	46	11	4	8	1	1	1	79	31	55	730	348	558
1946-50..	76	27	51	14	5	10	1	1	1	91	33	62	844	383	640
1951-55..	82	31	57	15	5	10	2	1	1	99	37	68	964	453	740
1953 ..	79	30	56	16	6	11	2	1	1	97	37	68	969	463	746
1954 ..	79	30	55	16	5	11	2	1	1	97	36	67	965	448	737
1955 ..	79	31	56	15	5	10	2	1	1	96	37	67	969	472	752
1956 ..	76	33	55	16	6	11	2	1	1	94	40	67	930	486	735
1957 ..	79	31	55	17	7	12	2	1	1	98	39	68	1,007	496	783

(a) Number of deaths per 100,000 of mean population.

(b) Includes "open verdict".

(c) Includes late effects of injuries due to operations of war.

(b) *Accidents (BE 47, BE 48)*. In 1957, the total number of deaths from accidental causes was 5,345 (3,871 males and 1,474 females). Half of the accidental deaths were the result of transport accidents. Of these, the numbers attributable to the major causes, and the percentages of the total accidental deaths in each case, were as follows:—Motor vehicle traffic accidents, 2,202 (41.20 per cent.); motor vehicle non-traffic accidents, 91 (1.70 per cent.); other road vehicle accidents, 114 (2.13 per cent.); railway accidents, 140 (2.62 per cent.); water transport accidents, 84 (1.57 per cent.); aircraft accidents, 40 (0.75 per cent.); a total of 2,671 (49.97 per cent.). Other important causes were accidental falls, 991 (18.54 per cent.); accidental drowning, 494 (9.24 per cent.); and accidents caused by fire and explosion of combustible material, 202 (3.78 per cent.).

(c) *Suicide (BE 49)*. (i) *Modes Adopted*. Deaths from suicide in 1957 numbered 1,170 (males, 844; females, 326). Firearms and explosives were used in 316 cases (27.01 per cent. of total deaths by suicide). Other important modes adopted, together with the numbers and relevant percentages, were as follows:—Poisoning other than by gases, 279 (23.85 per cent.); poisoning by gases, 175 (14.96 per cent.); hanging or strangulation, 225 (19.23 per cent.); submersion (drowning), 65 (5.55 per cent.); other modes, 110 (9.40 per cent.).

Of the 844 males who committed suicide, 298 (35.31 per cent.) used firearms or explosives. For females the most common mode was poisoning (other than by gases). This was used in 125 cases (38.34 per cent.).

(ii) *Age at Death*. From the following table, which shows the age of persons who committed suicide in 1957, it will be seen that both young and very old people took their lives during this year.

## AGE OF PERSONS WHO COMMITTED SUICIDE: AUSTRALIA, 1957.

Age Groups (Years).	Males.	Females.	Persons.	Age Group (Years).	Males.	Females.	Persons.
10-14 .. ..	2	1	3	60-64 .. ..	74	33	107
15-19 .. ..	18	5	23	65-69 .. ..	54	27	81
20-24 .. ..	36	11	47	70-74 .. ..	37	22	59
25-29 .. ..	57	20	77	75-79 .. ..	25	7	32
30-34 .. ..	70	24	94	80-84 .. ..	15	2	17
35-39 .. ..	91	29	120	85-89 .. ..	3	1	4
40-44 .. ..	82	28	110	90-94 .. ..	2	..	2
45-49 .. ..	98	47	145	Not stated ..	2	..	2
50-54 .. ..	94	30	124				
55-59 .. ..	84	39	123	<b>Total Deaths ..</b>	<b>844</b>	<b>326</b>	<b>1,170</b>

(d) *Homicide and Operations of War (BE 50).* In 1957, there were 127 deaths from homicide and injury purposely inflicted by other persons (not in war), of which non-accidental poisonings caused 4 deaths, assault by firearms and explosives 50, assault by cutting and piercing instruments 15, assault by other means 54 and injury by intervention of police 4. Deaths from injury resulting from the operations of war numbered 6, but all were deaths from late effects of such injuries.

12. *Age at Death and Average Issue of Deceased Married Males and Females.—Demography, Bulletin No. 75,* contains a number of tables showing, in combination with the issue, the age at marriage, age at death and occupation of married (including widowed or divorced) persons who died in Australia in 1957. Deaths of married males in 1957 numbered 35,554, and of married females, 29,167. The tables which follow deal, however, with only 35,153 males and 29,001 females, the information regarding issue in the remaining 567 cases being incomplete. The total number of children in the families of the 35,153 males was 109,498 and of the 29,001 females, 96,650. The average number of children is shown for various age groups in the following table.

## AGE AT DEATH AND AVERAGE ISSUE OF DECEASED MARRIED(a) MALES AND FEMALES: AUSTRALIA.

Age at Death (Years).	Average Issue.									
	Males.					Females.				
	1921.	1931.	1941.	1951.	1957.	1921.	1931.	1941.	1951.	1957.
Under 20 .. ..	..	0.75	..	0.43	0.25	0.77	0.66	0.79	0.83	0.66
20-24 .. ..	0.84	0.81	0.73	0.96	0.95	1.22	1.13	0.95	0.86	1.32
25-29 .. ..	1.29	1.33	1.12	1.29	1.38	1.86	1.81	1.45	1.61	1.69
30-34 .. ..	2.06	1.79	1.76	1.79	2.06	2.45	2.34	1.91	1.98	1.85
35-39 .. ..	2.58	2.13	2.11	2.12	2.21	3.29	2.89	2.30	2.49	2.44
40-44 .. ..	3.23	2.77	2.49	2.30	2.29	3.66	3.29	2.77	2.39	2.34
45-49 .. ..	3.48	3.10	2.68	2.51	2.45	3.76	3.55	2.93	2.59	2.34
50-54 .. ..	3.76	3.46	2.96	2.56	2.52	4.23	3.60	3.29	2.76	2.53
55-59 .. ..	4.41	3.69	3.28	2.71	2.55	4.69	4.01	3.55	3.03	2.65
60-64 .. ..	4.98	4.02	3.55	3.07	2.71	5.39	4.21	3.79	3.29	2.80
65-69 .. ..	5.50	4.41	3.73	3.25	2.98	5.86	4.82	4.01	3.63	3.15
70-74 .. ..	6.06	5.06	4.17	3.58	3.26	6.30	5.41	4.29	3.64	3.37
75-79 .. ..	6.66	5.65	4.56	3.83	3.48	6.56	6.02	4.85	3.96	3.55
80-84 .. ..	6.89	6.17	4.93	4.30	3.84	6.76	6.26	5.39	4.19	3.80
85-89 .. ..	7.18	6.59	5.70	4.63	4.08	6.93	6.57	5.85	4.68	4.06
90-94 .. ..	7.21	6.94	6.57	5.06	4.46	6.53	6.73	6.11	5.08	4.42
95-99 .. ..	6.97	6.69	7.04	5.78	5.27	6.05	7.10	6.34	5.76	4.78
100 and over ..	9.20	7.00	8.69	5.71	4.92	5.11	8.20	6.73	7.72	4.41
Age not stated	5.36	5.00	..	8.00	0.33	5.80	5.00	..	5.50	2.33
All Ages .. ..	4.97	4.44	3.91	3.39	3.11	5.05	4.72	4.22	3.68	3.33

(a) Includes widowed or divorced.

The figures in the preceding table include the issue both living and dead. The proportion of living to deceased issue, taking males and females together, is almost seven to one. The totals for 1957 are shown in the following table:—

**ISSUE OF DECEASED MARRIED(a) MALES AND FEMALES : AUSTRALIA, 1957.**

Issue of Married Males.				Issue of Married Females.			
Issue.	Males.	Females.	Total.	Issue.	Males.	Females.	Total.
Living ..	49,424	48,081	97,505	Living ..	40,742	41,268	82,010
Dead ..	7,121	4,872	11,993	Dead ..	8,779	5,861	14,640
<b>Total ..</b>	<b>56,545</b>	<b>52,953</b>	<b>109,498</b>	<b>Total ..</b>	<b>49,521</b>	<b>47,129</b>	<b>96,650</b>

(a) Includes widowed or divorced.

13. **Age at Marriage of Deceased Males and Females, and Issue.**—While the table giving the average issue of married males and females naturally shows an increase in the averages with advancing age at death, the following table, which gives the average issue of males and females according to the age at marriage of the deceased parent, shows a corresponding decrease in the averages as the age at marriage advances.

**AGE AT MARRIAGE AND AVERAGE ISSUE OF DECEASED MALES AND FEMALES: AUSTRALIA.**

Age at Marriage (Years).	Average Issue.									
	Males.					Females.				
	1921.	1931.	1941.	1951.	1957.	1921.	1931.	1941.	1951.	1957.
Under 15 ..	..	..	..	..	..	7.60	6.36	7.80	4.88	5.56
15-19..	6.32	6.15	5.40	4.63	4.45	6.97	6.79	6.10	5.41	4.93
20-24..	6.05	5.56	4.89	4.23	3.87	5.50	5.23	4.80	4.28	3.87
25-29..	5.17	4.70	4.21	3.65	3.29	4.09	3.79	3.51	3.14	2.95
30-34..	4.45	3.96	3.41	3.00	2.79	2.66	2.42	2.35	2.23	2.06
35-39..	3.90	3.14	2.80	2.45	2.22	1.61	1.40	1.26	1.16	1.14
40-44..	2.67	2.36	2.01	1.69	1.65	0.62	0.39	0.35	0.36	0.33
45-49..	2.20	1.96	1.52	1.33	1.04	0.03	0.12	0.01	0.07	0.13
50-54..	1.70	1.60	1.05	0.80	0.63	..	..	..	..	..
55-59..	1.30	0.95	0.79	0.49	0.50	..	..	..	..	..
60-64..	0.33	0.63	0.29	0.24	0.26	..	..	..	..	..
65 and over ..	0.25	0.18	0.01	0.29	0.21	..	..	..	..	..
Age not stated	4.93	3.64	2.95	2.81	2.49	5.41	3.96	2.45	3.17	2.65
<b>All Ages ..</b>	<b>4.97</b>	<b>4.44</b>	<b>3.91</b>	<b>3.39</b>	<b>3.11</b>	<b>5.05</b>	<b>4.72</b>	<b>4.22</b>	<b>3.68</b>	<b>3.33</b>

**§ 6. Vital Statistics of External Territories.**

Because of the outbreak of hostilities in the Pacific during the 1939-45 War, civil administration in the external territories was suspended on 11th February, 1942, and registration of births, deaths and marriages was not resumed until 1946. The following table for the year 1957 shows the number of marriages, births and deaths registered in the external territories under the control of Australia, namely:—Norfolk Island; Papua; the Trust Territory of New Guinea; and the Trust Territory of Nauru. More detailed information will be found in a series of tables in *Demography*, Bulletin No. 75.

**VITAL STATISTICS : EXTERNAL TERRITORIES, 1957.**  
(EXCLUDING INDIGENOUS POPULATION.)

Territory.	Marri-ages.	Births.			Deaths.		
		Males.	Females.	Persons.	Males.	Females.	Persons.
Norfolk Island .. ..	4	9	6	15	7	10	17
Papua .. ..	92	95	62	157	21	2	23
Trust Territory of New Guinea	77	253	246	499	55	18	73
Trust Territory of Nauru ..	2	14	10	24	3	..	3

NOTE.—Information for Cocos (Keeling) Islands is not available.

## CHAPTER XI.

## HOUSING.

## § 1. Introduction.

1. **General.** In issues of the Official Year Book prior to No. 43, certain information relating to the housing of the population was included in various chapters, but for a more convenient presentation of the material this complete chapter, which presents a summary of all available information on the subject, has been substituted.

In section 2 a brief outline is given of government assistance to housing since 1945 and of operations under the War Service Homes Act 1918–1956. Sections 3 and 4 of the chapter are devoted to statistics of new building and to characteristics of dwellings at the Censuses of 1947 and 1954.

2. **Number of Dwellings, Censuses 1911 to 1954.**—At each census, in addition to the questions relating to the personal particulars of the individual members of households, there have been a number of important questions on the Census Schedule designed to elicit information concerning the dwellings in which the population was housed at the date of the census. For the purpose of the census, a “dwelling” is any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building. The term has therefore a very wide reference, and includes, *in addition to houses and flats*, a great variety of dwellings ranging from a single-roomed shack to a multi-roomed hotel or institution.

The following table shows the number of occupied and unoccupied dwellings in Australia at each Census from 1911 to 1954. Occupied dwellings are classified into private and other dwellings. Dwellings other than private include hotels, boarding houses, lodging houses, hostels, hospitals, educational, religious and charitable institutions, defence and penal establishments, etc. The term “unoccupied dwellings” is not synonymous with vacant houses and flats available for occupancy, but refers mainly to “week-end”, holiday and other dwellings whose usual occupants were temporarily absent on the night of the Census; newly-completed dwellings awaiting occupancy are also included.

**DWELLINGS : AUSTRALIA, CENSUSES 1911 TO 1954.**  
(Excluding Dwellings occupied solely by Full-blood Aboriginals.)

Census.	Occupied.			Unoccupied.
	Private.	Other than Private.	Total.	
1911 .. .. .	894,389	29,070	923,459	33,473
1921 .. .. .	1,107,010	46,275	1,153,285	51,163
1933 .. .. .	1,509,671	37,705	1,547,376	68,772
1947 .. .. .	1,873,623	34,272	1,907,895	47,041
1954 .. .. .	2,343,421	36,932	2,380,353	112,594

## § 2. Government Assistance to Housing Since 1945.

1. **Agreements between the Commonwealth and State Governments.**—(i) *The 1945 Agreement.*—In November, 1945, the Commonwealth Government entered into an agreement with the Governments of the States whereby the Commonwealth Government would provide finance for, and the State Governments would undertake the building of, housing projects. Tasmania withdrew from the Agreement in August, 1950 and South Australia did not begin to operate under it until July, 1953. The Agreement expired on 30th June, 1956. Features of the 1945 Commonwealth and State Housing Agreement were:—

- (a) The Commonwealth Government agreed to advance to each participating State the amount expended for the construction of housing projects between 3rd December, 1943, and the date of the Agreement, and the amount required for the State's housing projects during a further period of ten years.
- (b) Each advance of money was to be repaid with interest thereon in equal annual instalments within a maximum period of 53 years from the date the advance was made, the interest to be at a rate not exceeding that payable in respect of the latest Commonwealth loan at the date of the advance.

- (c) Rents charged were to be economic rents, i.e., the rents were to be sufficient to meet repayments by the State to the Commonwealth of the capital cost of each dwelling with interest and of current outgoings such as the cost of maintenance, administration, rates and taxes and insurance.
- (d) The rental provisions of the Agreement provided for a system of rental rebates, whose basic principle was that a family with an income at the basic wage level did not need to pay more than one-fifth of its income in rent, regardless of the economic rent of the dwelling.
- (e) The Commonwealth Government was to bear three-fifths, and the State concerned two-fifths, of all cash losses sustained by the States, on an annual basis.

The following table shows the amount of money advanced to each State under the 1945 Agreement :—

**1945 COMMONWEALTH AND STATE HOUSING AGREEMENT : ADVANCES TO STATES.**  
(£'000.)

Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Total.
1945-46 .. ..	2,525	3,100	425	..	460	285	6,795
1946-47 .. ..	5,530	4,000	750	..	735	..	11,015
1947-48 .. ..	5,345	5,000	800	..	1,260	900	13,305
1948-49 .. ..	6,295	5,200	900	..	1,647	450	14,492
1949-50 .. ..	6,600	6,300	1,250	..	1,965	1,100	17,215
1950-51 .. ..	7,890	8,600	2,700	..	2,350	100	21,640
1951-52 .. ..	8,514	10,061	4,489	..	3,483	..	26,547
1952-53 .. ..	12,100	11,270	3,730	..	2,900	..	30,000
1953-54 .. ..	12,450	12,000	4,500	4,500	3,750	..	37,200
1954-55 .. ..	10,800	9,450	1,800	3,600	3,500	..	29,150
1955-56 .. ..	10,800	10,800	3,000	3,600	5,000	..	33,200
<b>Total .. ..</b>	<b>88,849</b>	<b>85,781</b>	<b>24,344</b>	<b>11,700</b>	<b>27,050</b>	<b>2,835</b>	<b>240,559</b>

The number of dwellings erected in each State under the 1945 Agreement is shown in the following table :—

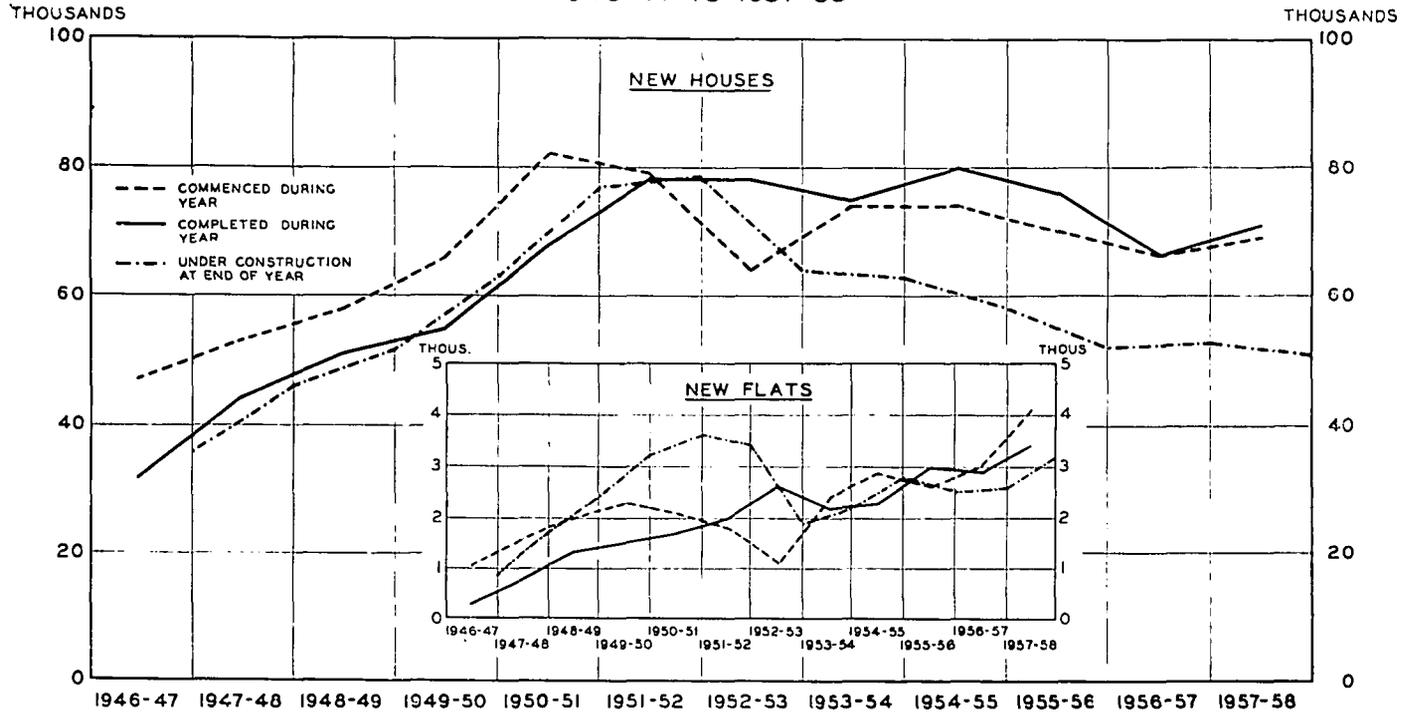
**1945 COMMONWEALTH AND STATE HOUSING AGREEMENT : NUMBER OF DWELLINGS<sup>(a)</sup> COMPLETED.**

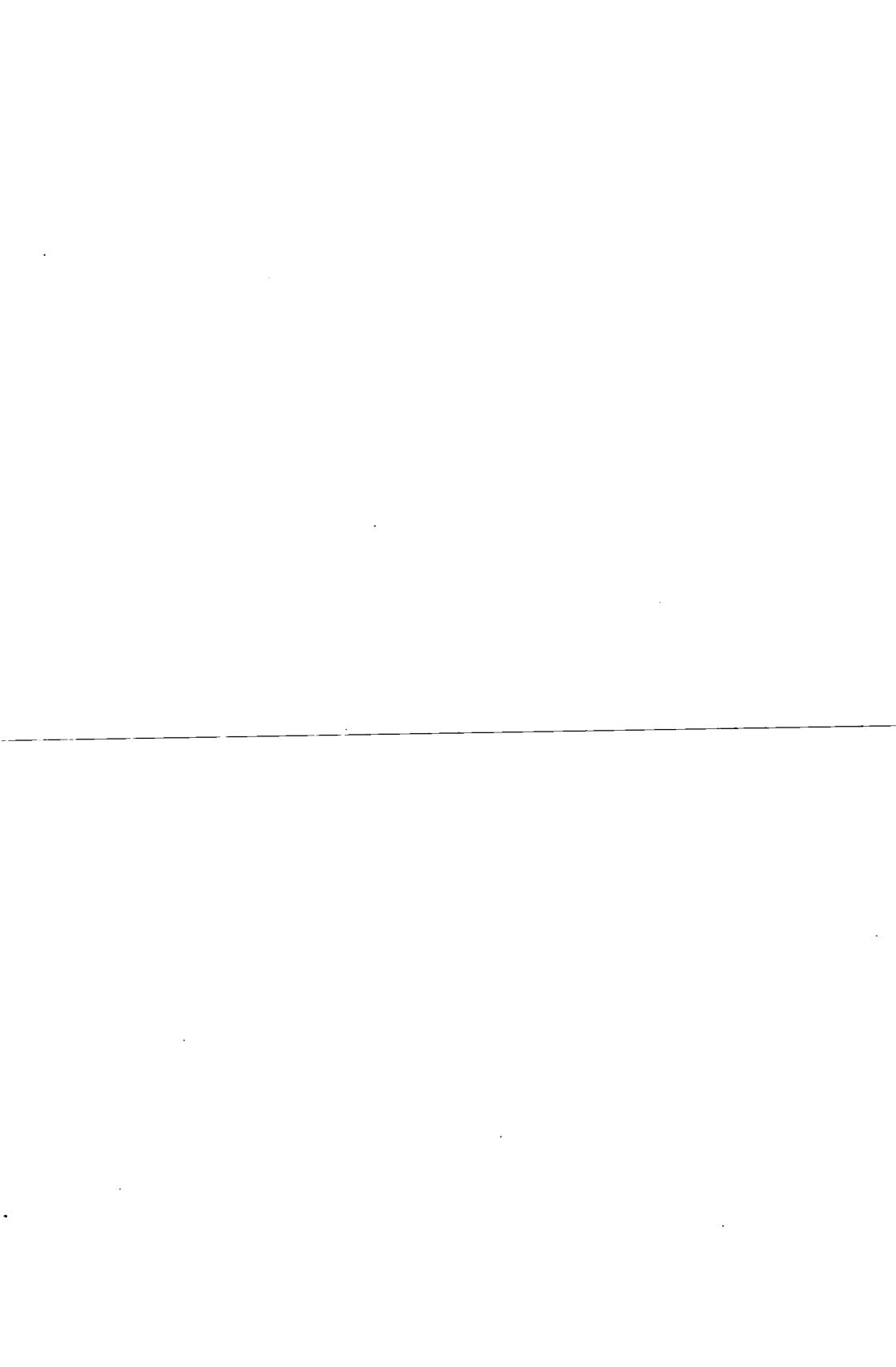
Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Total.
1945-46 .. ..	1,589	1,768	224	..	293	154	4,028
1946-47 .. ..	2,200	1,458	470	..	537	208	4,873
1947-48 .. ..	2,582	2,231	547	..	849	218	6,427
1948-49 .. ..	3,440	2,357	573	..	976	184	7,530
1949-50 .. ..	3,076	2,454	643	..	981	284	7,438
1950-51 .. ..	3,273	2,699	554	..	1,269	82	7,877
1951-52 .. ..	3,708	2,970	1,082	..	1,023	..	8,783
1952-53 .. ..	4,280	3,238	1,635	..	1,111	..	10,264
1953-54 .. ..	5,109	3,590	1,506	1,006	1,472	..	12,683
1954-55 .. ..	4,932	3,960	1,382	2,013	2,031	..	14,318
1955-56 .. ..	3,529	4,152	840	1,885	1,531	..	11,937
<b>Total .. ..</b>	<b>37,718</b>	<b>30,877</b>	<b>9,456</b>	<b>4,904</b>	<b>12,073</b>	<b>1,130</b>	<b>96,158</b>

(a) Includes flats.

# NEW HOUSES AND FLATS : AUSTRALIA

1946-47 TO 1957-58





Initially, houses constructed under the 1945 Commonwealth and State Housing Agreement could be sold to tenants, provided the tenant was able to arrange payment of the full purchase price of the house to the State Authority immediately on sale. Under this arrangement sales to tenants were relatively few. In April, 1955, the Commonwealth and the States entered into a supplementary agreement whereby the State Governments were permitted to sell houses to tenants on terms. These were:—deposit, 5 per cent. of the first £2,000 and 10 per cent. of the balance of the purchase price of the house, the maximum amount of the remaining balance being limited to £2,750 and repayment of the balance to be made over a maximum period of 45 years at an interest rate of 4½ per cent. a year. Tenants eligible under the War Service Homes Act were entitled to purchase houses built under the Agreement on the terms provided in that Act. The number of houses sold under the Agreement is as follows :—

## 1945 COMMONWEALTH AND STATE HOUSING AGREEMENT : HOUSES SOLD.

Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Total.(a)
1947-48 .. ..	..	..	109	..	..	109
1948-49 .. ..	15	..	63	..	..	78
1949-50 .. ..	98	6	12	..	115	231
1950-51 .. ..	122	39	94	..	508	763
1951-52 .. ..	338	26	86	..	480	930
1952-53 .. ..	528	13	13	..	309	863
1953-54 .. ..	403	6	16	1	94	520
1954-55 .. ..	165	..	26	7	96	294
1955-56 .. ..	733	1,289	121	275	177	2,595
1956-57 .. ..	1,538	1,363	93	66	101	3,161
1957-58 .. ..	769	1,050	137	54	94	2,104
<b>Total .. ..</b>	<b>4,709</b>	<b>3,792</b>	<b>770</b>	<b>403</b>	<b>1,974</b>	<b>11,648</b>

(a) Tasmania did not operate under the 1945 Agreement after August, 1950.

(ii) *The 1956 Agreement.* In 1956, the Commonwealth and the States entered into a new agreement, under which added emphasis was placed on the construction of homes for private ownership. Features of the agreement are :—

- (a) The Commonwealth Government is providing finance to the States over a period of five years ending 30th June, 1961, for the erection of housing projects.
- (b) For the first two years of the agreement, 20 per cent. of the money allocated to each State was advanced to building societies and other approved institutions for lending to private house builders. During the remaining three years of the agreement this proportion shall be 30 per cent.
- (c) The remaining 70 per cent. (first two years, 80 per cent.) of the allocation to each State may be used by the States for the erection of houses for either rental or sale. The States determine the type of houses to be erected, their location and the selection of tenants. They also fix the terms of selling.
- (d) In any one year, the Commonwealth may specify that an amount not exceeding 5 per cent. of the moneys referred to in (c) above, be set aside for the erection of houses for serving members of the defence forces nominated by the Commonwealth. The Commonwealth provides supplementary advances to the States equal to the amounts set aside by them for this purpose.
- (e) Each advance of money and interest thereon is to be repaid in equal annual instalments over a period of 53 years from the date each advance is made. The rate of interest chargeable on advances is the long term bond rate, less three quarters of one per cent. when the bond rate does not exceed 4½ per cent. a year, and, less one per cent. when the bond rate exceeds 4½ per cent. a year. The effective interest rate during 1956-57 and 1957-58 was 4 per cent. a year, i.e. 5 per cent. less one per cent.

The following table shows progress made under the 1956 Housing Agreement during 1957-58:—

**1956 COMMONWEALTH AND STATE HOUSING AGREEMENT: SUMMARY, 1957-58.**

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Total.
Total Advances .. £'000	11,000	10,000	3,160	4,000	3,000	2,000	33,160

**STATE HOUSING PROGRAMME.**

Allocation of Total Advances (80 per cent.) .. .. . £'000	8,800	8,000	2,528	3,200	2,400	1,600	26,528
Dwellings—							
Commenced .. .. .	2,749	2,557	782	1,580	870	385	8,923
Completed(a) .. .. .	3,669	2,414	804	1,564	1,136	459	10,046
Under construction at 30th June, 1958 .. .. .	1,492	1,191	502	1,281	376	114	4,956
Sold .. .. .	2,910	286	548	205	614	454	5,017

**SERVICE HOUSING.**

Funds Allocated(b) .. .. . £'000	880	800	253	319	29	69	2,350
Agreed Programme (Number of Dwellings) .. .. .	300	(c) 225	82	116	10	20	753
Dwellings Completed(d) .. .. .	367	225	77	111	67	20	867

**HOME BUILDERS' ACCOUNT.**

Allocation of Total Advances (20 per cent.) .. .. . £'000	2,200	2,000	632	800	600	400	6,632
Amount drawn by Institutions £'000	2,280	2,326	653	796	600	575	7,230
Dwellings—							
Approved .. .. .	221	824	214	441	238	3	1,941
Commenced .. .. .	566	868	193	408	249	83	2,367
Completed .. .. .	636	(e) 955	150	265	327	86	2,419
Purchased—							
New Dwellings .. .. .	138	179	160	130	9	13	629
Other .. .. .	51	..	..	..	..	5	56

(a) Includes Service Housing.

(b) Fifty per cent. by Commonwealth and 50 per cent. by State.

(c) Includes 11 dwellings carried over from 1956-57. (d) Included in State Housing Programme above.

(e) Includes dwellings purchased which have been completed during 1957-58.

**2. Imported Houses.**—With the object of supplementing the number of houses being constructed by the building industry within Australia, the Commonwealth Government in 1950 sponsored a plan to import prefabricated houses from overseas. Under the States Grants (Imported Houses) Act 1950, the Commonwealth undertook to pay a subsidy not exceeding £300 per house to assist approved State Housing Authorities to meet the cost of houses brought to Australia from overseas.

Under this plan, the Commonwealth paid subsidy on 13,979 houses imported by State Authorities. Of these, 7,613 units were erected under the 1945 Commonwealth and State Housing Agreement on behalf of the State Governments themselves, whilst other houses were erected for governmental authorities concerned with public utilities such as the generation of electricity, railways and water supply.

A total of 4,167 houses, imported by the Commonwealth Government, were erected by the Department of Works and the Snowy Mountains Hydro-Electric Authority.

Of the 18,182 houses, imported and erected the United Kingdom supplied slightly more than half, with France, Austria and Sweden the next largest suppliers in that order.

Expenditure by the Commonwealth Government on subsidies to the States importing houses under this plan was as follows: New South Wales, £252,000; Victoria, £1,645,200; Queensland, £703,800; South Australia, £1,173,000; Western Australia, £419,700; Total, £4,193,700. Imports of houses under this scheme ceased in January, 1954.

**3. Housing Schemes in Commonwealth Territories.**—(i) *Northern Territory.* In 1946, control of all Government-owned residences in the Territory (excluding those belonging to the Defence Services or Commonwealth Railways or attached to post offices) was vested in

the Administration. The Administration provides houses for rental for its own and other Commonwealth employees. In 1953, a Housing Scheme was inaugurated under which potential house builders may obtain loans of up to £2,750 for the erection of houses, the purchase or extension of existing houses or the discharge of mortgages on houses. Up to 31st October, 1958, 341 loans had been approved. These were for:—new houses, 237; extensions to existing houses and/or discharge of mortgages, 36; purchase of existing houses, 68.

(ii) *Australian Capital Territory.* The Commonwealth Government provides houses primarily for rental to employees of Government organizations and to persons privately employed in the Australian Capital Territory.

From 1st July, 1945, to 30th June, 1958, 4,953 houses and flats were erected for the Department of the Interior for letting.

Government rental houses may be purchased by tenants and the basis of sale is a minimum deposit of 5 per cent. of the first £2,000 of the purchase price fixed by the Department of the Interior and 10 per cent. of the balance, with a maximum advance by way of mortgage of £2,750. Repayment may be made over a maximum period of 45 years on all types of houses. Interest charged on loans is 4½ per cent. a year. Since 1950, 1,331 houses have been sold to tenants.

Loans may be granted by the Commissioner for Housing to enable persons to purchase, erect or enlarge houses in the Territory or to discharge mortgages. Where the Commissioner's valuation of the property concerned does not exceed £2,000 the maximum loan may not exceed 95 per cent. of the valuation. If the Commissioner's valuation exceeds £2,000 the maximum loan is 95 per cent. of the first £2,000 and 90 per cent. of the balance (but in no case can the amount lent exceed £2,750). Repayment may be made over a maximum period of 45 years. The current rate of interest is 5 per cent. a year. From 1st July, 1949, to 30th June, 1958, 468 loans were granted.

(iii) *Papua and New Guinea.* The Housing Loans Ordinance 1953 permits the advance of loans of up to £2,750 to any member of the community for the erection of a house or the purchase or extension of an existing house. The loans are limited to declared township areas and are repayable over a maximum period of 45 years. The effective rate of interest is 5 per cent. a year. Up to 20th May, 1958, loans totalling £210,597 had been approved.

4. **Other Housing Schemes in the States.**—(i) *General.* In each State, the major Government housing schemes operated by the State Housing Authorities are those provided for under the Housing Agreements between the Commonwealth and State Governments referred to earlier. Other State Government assistance to housing is referred to in the following paragraphs.

(ii) *New South Wales.* The principal schemes operating in New South Wales are:—

(a) *Commission-Financed Advances.* Under the Housing Act 1912–55, the Housing Commission is empowered to provide finance to persons to have houses erected on their own land, to purchase existing dwellings, or to effect improvements or repairs to houses. In respect of advances made under the Act prior to 1952, the maximum amount that could be lent was limited to £1,540, repayment of which could be made over a maximum period of 45 years. Interest charged was at the rate of 4½ per cent. a year. Under this scheme 779 houses were erected. Regulations prescribing the present maximum amount that may be advanced and the limitation on income which may be received by an applicant for a loan have not been published and at present no advances are being made.

(b) *Rental Housing (other than Housing Agreements.)* Upon request by other State Departments, the Housing Commission will erect houses for employees of those Departments, e.g., Education, Agriculture, Water Conservation, etc. These Departments provide the necessary land and funds needed to finance the erection of the houses. Rentals charged are fixed by the Departments in accordance with the salaries of the officers occupying the houses. The number of rental houses erected (other than under the Housing Agreements) is 795.

(c) *Sales Scheme.* During 1953–54, the Housing Commission began the erection of 100 houses for sale. Under this scheme, the Commission acted as the construction authority whilst administrative arrangements are carried out by the Rural Bank. Houses were sold on the basis of 10 per cent. deposit with repayment of the balance over a maximum period of 40 years. Construction of all houses has been completed.

(iii) *Victoria.* In 1956, a Home Finance Trust was established with the object of receiving money from institutions and others in order to make loans for the erection or

purchase of houses. Applicants for loans must declare that they intend to use the houses as homes for themselves, their families and dependants. Except in special circumstances, no loan will be granted if the borrower or wife or husband of the borrower already owns a house in Victoria at the date of the proposed mortgage.

Loans granted are on the basis of a first mortgage over the house. Loans are not to exceed 95 per cent. of the value of the house and are not made if the value of the house exceeds £4,500. In the case of purchase the house must not have been erected more than two years before the date of the mortgage. Repayment of loans may be made over a maximum period of 30 years, with interest charges determined by the Trust. At 30th June, 1958, 977 loans totalling £2,628,585 had been made.

(iv) *Queensland.* In this State there are two housing schemes operating—

(a) Under the State Housing Acts, 1945 to 1957, the Queensland Housing Commission makes advances to eligible applicants on the security of homes to be erected. A person to be eligible must be the proprietor of a suitable building site, must not already own a dwelling and must undertake to use the completed dwelling as a home for himself and family. The present maximum advances allowable under the Acts are £2,400 for a timber-frame building, £2,500 for a brick veneer and £2,750 for a brick or concrete building. The rate of interest at present chargeable on advances is 5½ per cent. a year. Repayment may be made at the option of the borrower over either a 30-year or a 45-year period. A borrower or purchaser who elects to repay over a 30-year period, who is under 40 years of age, and who has passed a prescribed medical examination, is entitled to free life insurance cover in an amount sufficient to liquidate his indebtedness to the Commission in the event of his death before his loan has been fully repaid, provided that the maximum benefit payable under such insurance cover does not exceed £2,250. The total amount advanced on completed dwellings up to 30th June, 1958, was £18,539,391. The number of dwellings constructed under these Acts up to 30th June, 1958, was 25,613.

(b) Workers homes are erected by the Queensland Housing Commission under the Workers' Homes Act 1919–1957. These homes are intended for persons who are not the owners of building sites, and applications are confined to persons with a net annual income for taxation purposes of not more than £800. The Housing Commission builds the home to suit the applicant's needs, on Crown Land, or on land purchased for the purpose, which is then converted to perpetual leasehold tenure. An applicant pays a deposit of 5 per cent. of the purchase price of the home and the balance by monthly rent over a term of 30 to 45 years. The rate of interest is 5½ per cent. a year. The number of houses constructed under this Act up to 30th June, 1958, was 2,346.

(v) *South Australia.* In South Australia, the Housing Trust builds houses for both rental and sale and, in addition, administers an emergency dwelling scheme for the South Australian Government. From July, 1946 to 30th June, 1958, 31,173 houses were erected by the Trust in both city and country areas.

(a) *Rental Houses.* The majority of the Trust's rental houses are of brick or stone construction and are built in pairs in housing groups. The Trust has a large number of flats for rental, tenancy of which is restricted to married couples and others without young children. Specially designed flats for pensioners and other elderly persons of limited means are built. The Trust administers a scheme, on behalf of the South Australian Government, to assist people in country towns who cannot afford to pay an economic rent. Those assisted include war widows, deserted wives with families, servicemen's widows, pensioners and incapacitated ex-servicemen's families. Rents charged for accommodation are generally based on the overall cost of construction, and vary not only according to the size of the dwelling but also as to date of erection. As at 1st November, 1958, the rents of 5-roomed houses (i.e., 3 bedrooms) ranged from £1 17s. 6d. a week for houses of an older type to £3 5s. a week for houses then being completed. Factors taken into consideration when allotting rental houses include date of application, housing need and suitability of tenant. Persons with high incomes are asked to consider purchasing their own homes.

(b) *Sales Scheme.* Houses built under this scheme, which was inaugurated in 1946, are of solid or timber-frame construction. More than 14,000 have been completed in both metropolitan and country areas since the scheme began. When houses are sold, the usual practice is for the Trust to recover the total cost of the house and land by the purchaser paying the total amount in cash or (as is usually the case) paying a deposit (which varies according to the type of house—at present £300 for a timber-frame

house and £500 for a 5-roomed brick house—and the purchaser's ability to pay) and raising the balance by way of mortgage. In cases where the deposit and first mortgage are insufficient, the Trust may advance the balance by way of a second mortgage, the repayment term of which is a maximum of 30 years, interest being at the rate of 5½ per cent. a year. In 1956, the Trust began the erection of houses, which may be of solid or timber-frame construction or a mixture of both, for individuals on their own land. Houses are built by contract under the Trust's supervision. Prices for building and supervision of the standard houses covered by the scheme in late 1958 ranged from £2,950 for a 2-bedroom brick house to £4,500 for a 6-roomed (2-storey) house.

(c) *Rural Housing*. In order to assist primary producers, the Trust will erect houses on the applicant's own land for his own use or that of his employees, either using local materials or transporting prefabricated houses to the site. At the end of 1958, prices for houses erected on level sites within 100 miles of Adelaide ranged from £1,900 for a 2-bedroom minimum type timber house to £2,650 for a 3-bedroom, asbestos cement sheeted, timber house.

(vi) *Western Australia*. Under the State Housing Act, 1946–1956 the State Housing Commission has two types of home ownership schemes in operation. These are—(a) Freehold scheme on a mortgage or contract of sale basis; and (b) leasehold scheme on a perpetual Crown lease.

Under both schemes, the Housing Commission builds the houses on a contract basis—with the freehold scheme on land owned by the applicant or the Commission; with the leasehold scheme on land dedicated by the Crown for the purposes of the State Housing Act. With each scheme, the maximum loan granted is £2,500, except in the case of a house situated north of the 26th parallel of latitude when the Minister, on the recommendation of the Commission, may approve of an advance exceeding £2,500. Under the mortgage scheme a deposit of not less than 10 per cent. is required, but with the contract of sale or leasehold scheme a deposit of less than 10 per cent. may be accepted at the discretion of the Commission. The rate of interest chargeable in both cases is, at present, 5½ per cent. a year. The repayment of the balance may be made over a maximum period of 45 years. An applicant's gross income is at present not to exceed £1,077 a year plus £25 per year for each dependent child under 16 years of age.

A second mortgage scheme also exists. This provides a maximum loan of £1,000 under the same conditions as above. The loan on a second mortgage, however, must not exceed the amount advanced under the first mortgage. The applicant has still to provide at least 10 per cent. of the cost of the house, which is not to exceed £3,000.

The number of houses completed in the post-war years under the above Act (to 30th June, 1958) was—leasehold, 2,132, freehold, 907, assistance by second mortgage, 381.

(vii) *Tasmania*. The Agricultural Bank is authorized under the terms of the Homes Act 1935 to make loans to eligible persons for home building on the security of a first mortgage over the property. To be eligible a person must be married or be about to marry or have dependants for whom it is necessary to provide a home. At present, there are no statutory limitations as to the maximum income which an eligible applicant may receive. However, it is the policy of the Bank not to make loans to persons who are well able to provide houses for themselves. The maximum amount which the Bank will lend at present is £3,300 on homes built in proclaimed brick areas, and £3,000 on timber houses. The rate of interest at present charged is 5½ per cent. a year. Present policy is to allow a maximum of 31 years for repayment of loans.

5. *War Service Homes*.—The provision of War Service Homes is a function of the War Service Homes Division of the Department of National Development, and the administration of the War Service Homes Act is under the control of the Director of War Service Homes.

The War Service Homes Act 1918–1956 is a measure for the provision of homes for Australian ex-servicemen who served during the 1914–1918 War or the 1939–1945 War and, subject to the statutory provisions of the Act, to persons with service in Korea or Malaya. Provision is made also for assistance to the female dependants of Australian ex-servicemen and other classes of eligible persons as defined in the Act. Assistance may be granted to an eligible person and the wife or husband of that person, as the case may be, as joint tenants.

The maximum amount of loan or advance which may be granted under the Act is £2,750. The period of repayment may be approved up to 45 years. In the case of a widow or widowed mother of an Australian ex-serviceman, the period may be extended to a maximum of 50 years.

The War Service Homes Division does not provide homes for occupation on a purely tenancy basis.

From the inception of operations under the War Service Homes Act to 30th June, 1958, (figures in parentheses indicate cases where eligibility has been established as a result of

service during the 1939–45 War or in Korea or Malaya), 186,777 (134,899) applications were approved; 70,486 (47,263) homes were built, or assistance to build them was given; 74,777 (58,764) homes were purchased; and 19,537 (15,891) mortgages were discharged. The total number of homes provided under the War Service Homes Act to 30th June, 1958, was 164,800 including 121,918 to persons who served during the 1939–45 War or in Korea or Malaya. In addition, the Division had approved 15,503 transfers and resales, of which 6,771 were in respect of persons whose eligibility had been established as a result of service during the 1939–45 War or in Korea or Malaya. Applications approved under the Commonwealth-State Housing Agreements of 1955 and 1956 numbered 1,459 (1,375) and homes purchased 1,380 (1,299).

During 1957–58, 14,383 (13,627) applications were approved; 5,524 (5,330) homes were built or assistance to build them was given; 6,150 (5,829) homes were purchased; and 1,584 (1,514) mortgages were discharged. The total number of homes provided during the year 1957–58 was 13,258 (12,673). Transfers and resales approved numbered 1,097 (958). Applications approved under the Commonwealth-State Housing Agreements of 1955 and 1956 numbered 317 (299) and homes purchased 435 (405).

At 30th June, 1958, 2,619 homes, including 635 group homes, were in course of construction; 970 contracts, of which 193 were for group homes, had been let but work had not started; and 572 tenders, including 10 for group homes, had been called but not finally dealt with. The majority of these homes are being provided for persons who served during the 1939–45 War.

The total capital expenditure from inception to 30th June, 1958, was £294,839,603, including £35,182,155 for 1957–58. Receipts from inception to 30th June, 1958, amounted to £122,296,329, including £14,652,084 during 1957–58. Of the total receipts, £61,293,404 had been paid to the National Debt Sinking Fund, including £6,565,722 for 1957–58.

At 30th June, 1958, the total amount of insurances in force, including cover notes, amounted to £375,579,293. During 1957–58, the premium income amounted to £281,193, and expenditure from the War Service Homes Insurance Trust Account to £155,639.

At 30th June, 1958, arrears of instalments outstanding amounted to £462,055, or 0.40 per cent. of the total instalments due.

**6. Other Forms of Government Assistance.**—(i) *General.* In addition to the assistance given to housing as outlined above, the Commonwealth and State Governments, through advances by Government Banks and the exercise of certain guarantees of the operations of Co-operative Terminating Building Societies by State Governments, further assist in making finance available for the erection and purchase of houses.

(ii) *Government Banks.* The terms and conditions governing the making of advances may be altered from time to time; consequently, no attempt has been made to tabulate them. However, the usual loan for a house of solid construction (brick, etc.) is generally between £2,250 and £2,500. The average loan for a timber-frame house is £2,000. Interest rates charged average 5½ per cent. a year. In some institutions this may be changed, usually after from 5 years to 10 years from the date of the loan. The maximum period of repayment ranges from about 20 years for timber-frame houses to 30 to 40 years for a house of solid construction.

(iii) *Building Societies.* There are some 1,700 building societies in Australia, over 95 per cent. of which are of the terminating type. Most of the terminating societies are in New South Wales and Victoria, where the movement derives its strength from State legislation, under which the Government of the State guarantees loans made to the societies. Terminating societies also operate in Queensland, where legislation has recently been introduced to provide a government guarantee for loans made to them, and in Western Australia and Tasmania. A few terminating societies of the Starr-Bowkett type, an earlier and now less popular form of terminating society, operate in all States.

In addition to the terminating societies, there are a number of permanent building societies operating in all States under State legislation. State Governments do not guarantee the borrowings or lendings of these societies, except in Western Australia, where the Housing Loan Guarantee Act, 1957 provides guarantees in respect of loans made by approved leading institutions, including permanent building societies, to individuals on the security of a mortgage.

### § 3. Statistical Summary—New Building.

**1. General.**—The statistics in this section relate to the operations of private contractors, Government authorities and owner-builders, with the exception of those relating to employment, which do not include the numbers of persons working on owner-built houses. In general, the figures relate to *new* building only, and data on alterations, additions, renovations and repairs to buildings are excluded, because of the difficulty in obtaining complete lists of persons who engage in these operations. Figures for houses exclude converted military huts, flats and shop dwellings. Some houses built on farms are not included but these do not affect the figures materially.

These statistics are available for each quarter from the September quarter, 1945.

More detailed information on building activity may be found in the *Quarterly Bulletin of Building Statistics*.

The following definitions of terms used in this section are necessary for interpretation of the data presented:—

*Owner-built.* An "owner-built" house is one actually erected or being erected by the owner or under the owner's direction without the services of a contractor who is responsible for the whole job.

*Contract-built.* Includes the operations of all building contractors and Government instrumentalities which undertake the erection of new buildings.

*Commenced.* A building is regarded as having been commenced when work on foundations has begun. Owing to the difficulty of defining the exact point that this represents in building operations, it is probable that the classifications made by informants are not entirely uniform.

*Completed.* A building is regarded as having been completed when the contractor has fulfilled the terms of the contract. As with commencements, the classifications made may not be entirely uniform.

*Under Construction.* A building under construction at the end of a period is so classified regardless of whether construction was actively proceeding on that particular date.

*Employment.* Figures relate to persons actually working on the jobs of contractors who undertake the erection of new buildings and of Government instrumentalities which erect new buildings on their own account. They include persons actually engaged on alterations, additions, repairs and maintenance when these jobs are undertaken by such contractors and instrumentalities. The figures include working principals and their employees, men working as or for sub-contractors, and men temporarily laid off on account of weather.

Contractors are asked to give details of the persons employed on a specified day but, because of frequent movement between jobs and because some persons (such as electricians, etc.) may work on several jobs which are under construction simultaneously, some duplication may occur.

The figures do not include persons working on owner-built houses, and employees of builders who undertake only alterations, additions, repairs and maintenance.

*Values.* All values shown do not include the value of land and represent the estimated value of buildings on completion.

2. New Houses.—(i) *Commenced, Completed and Under Construction, 1953-54 to 1957-58.* The next table provides a summary of the number of new houses commenced, completed and under construction in each State and Territory.

NEW HOUSES : NUMBER.  
(Including Owner-built Houses.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (a)	A.C.T.	Aust.
COMMENCED.									
1953-54	.. b 27,590	20,915	8,513	6,792	7,608	2,665	(c)	355	b 74,438
1954-55	.. 24,348	22,674	7,784	7,190	8,575	2,867	249	640	74,327
1955-56	.. 23,506	21,245	7,173	8,377	6,336	2,490	341	499	69,967
1956-57	.. 23,477	19,649	7,572	6,832	5,565	2,591	251	509	66,446
1957-58	.. 24,177	21,933	7,050	6,951	5,328	2,378	311	1,139	69,267
COMPLETED.									
1953-54	.. 26,513	21,593	8,961	7,522	7,627	2,630	(c)	552	75,398
1954-55	.. 28,882	23,839	7,925	7,323	8,792	2,480	199	398	79,838
1955-56	.. 26,369	22,652	7,396	7,721	7,760	2,721	312	605	75,536
1956-57	.. 22,267	20,185	7,217	7,193	5,030	2,759	328	561	65,540
1957-58	.. 25,114	21,367	7,357	7,606	6,196	2,566	275	698	71,179
UNDER CONSTRUCTION AT END OF YEAR.									
1953-54	.. b 24,670	20,995	3,470	5,750	5,932	2,149	(c)	449	b 63,415
1954-55	.. 20,136	19,827	3,329	5,602	5,715	2,536	211	691	58,047
1955-56	.. 17,273	18,399	3,106	6,252	4,284	2,305	240	585	52,444
1956-57	.. 18,483	17,863	3,461	5,854	4,819	2,137	163	533	53,313
1957-58	.. 17,546	18,429	3,154	5,199	3,951	1,949	199	974	51,401

(a) Includes flats.

(b) Partly estimated.

(c) Not available.

(ii) *Commenced, 1953-54 to 1957-58.* The number of new houses commenced in each State and Territory by contractors and owner-builders is shown in the following table.

**NEW HOUSES COMMENCED : NUMBER.**

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aust.
<b>CONTRACT-BUILT.(b)</b>									
1953-54 ..	c 16,105	12,756	6,625	5,017	4,557	1,477	(d)	332	c 46,869
1954-55 ..	15,049	14,543	6,075	5,386	5,764	1,636	221	600	49,274
1955-56 ..	13,812	13,154	5,469	6,303	4,489	1,342	283	410	45,262
1956-57 ..	14,607	12,371	6,006	5,053	4,455	1,465	177	408	44,542
1957-58 ..	15,729	15,654	5,559	5,523	4,284	1,291	227	975	49,242
<b>OWNER-BUILT.</b>									
1953-54 ..	c 11,485	8,159	1,888	1,775	3,051	1,188	(d)	23	c 27,569
1954-55 ..	9,299	8,131	1,709	1,804	2,811	1,231	28	40	25,053
1955-56 ..	9,694	8,091	1,704	2,074	1,847	1,148	58	89	24,705
1956-57 ..	8,870	7,278	1,566	1,779	1,110	1,126	74	101	21,904
1957-58 ..	8,448	6,279	1,491	1,428	1,044	1,087	84	164	20,025
<b>TOTAL.</b>									
1953-54 ..	c 27,590	20,915	8,513	6,792	7,608	2,665	(d)	355	c 74,438
1954-55 ..	24,348	22,674	7,784	7,190	8,575	2,867	249	640	74,327
1955-56 ..	23,506	21,245	7,173	8,377	6,336	2,490	341	499	69,967
1956-57 ..	23,477	19,649	7,572	6,832	5,565	2,591	251	509	66,446
1957-58 ..	24,177	21,933	7,050	6,951	5,328	2,378	311	1,139	69,267

(a) Includes flats. (b) Includes operations of Government Authorities. (c) Partly estimated. (d) Not available.

(iii) *Completed. (a) 1953-54 to 1957-58.* The following table shows the number of new houses completed in each State and Territory by contractors and owner-builders.

**NEW HOUSES COMPLETED : NUMBER.**

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aust.
<b>CONTRACT-BUILT(b).</b>									
1953-54 ..	14,296	12,062	7,149	5,802	4,569	1,536	(c)	530	45,944
1954-55 ..	16,658	14,450	6,419	5,672	5,766	1,504	174	369	51,012
1955-56 ..	15,085	14,390	5,806	5,951	5,370	1,559	259	575	48,995
1956-57 ..	13,657	13,159	5,649	5,491	3,537	1,460	262	505	43,720
1957-58 ..	16,186	14,630	5,830	5,733	4,921	1,449	201	614	49,564
<b>OWNER-BUILT.</b>									
1953-54 ..	12,217	9,531	1,812	1,720	3,058	1,094	(c)	22	29,454
1954-55 ..	12,224	9,389	1,506	1,651	3,026	976	25	29	28,826
1955-56 ..	11,284	8,262	1,590	1,770	2,390	1,162	53	30	26,541
1956-57 ..	8,610	7,026	1,568	1,702	1,493	1,299	66	56	21,820
1957-58 ..	8,928	6,737	1,527	1,873	1,275	1,117	74	84	21,615
<b>TOTAL.</b>									
1953-54 ..	26,513	21,593	8,961	7,522	7,627	2,630	(c)	552	75,398
1954-55 ..	28,882	23,839	7,925	7,323	8,792	2,480	199	398	79,838
1955-56 ..	26,369	22,652	7,396	7,721	7,760	2,721	312	605	75,536
1956-57 ..	22,267	20,185	7,217	7,193	5,030	2,759	328	561	65,540
1957-58 ..	25,114	21,367	7,357	7,606	6,196	2,566	275	698	71,179

(a) Includes flats. (b) Includes operations of Government Authorities. (c) Not available.

(b) *Material of Outer Walls, 1957-58.* The following table shows the number of new houses completed in each State and Territory during 1957-58, classified according to the material of their outer walls.

**NEW HOUSES COMPLETED : NUMBER, 1957-58.**  
(Including Owner-built Houses.)

Material of Outer Walls.	N.S.W.	Vic.	Q'ld.	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aust.
Brick, Brick Veneer, Concrete and Stone	5,571	7,905	672	6,273	4,167	583	36	669	25,876
Wood (Weatherboard, etc.)	7,976	11,796	5,007	129	27	1,891	4	24	26,854
Fibro Cement .. .. .	11,529	1,201	1,612	1,199	1,997	92	230	4	17,864
Other .. .. .	38	465	66	5	5	..	5	1	585
<b>Total .. .. .</b>	<b>25,114</b>	<b>21,367</b>	<b>7,357</b>	<b>7,606</b>	<b>6,196</b>	<b>2,566</b>	<b>275</b>	<b>698</b>	<b>71,179</b>

(a) Includes flats.

(c) *Material of Outer Walls, 1953-54 to 1957-58.* The following table shows the number of new houses completed in Australia, classified according to the material of their outer walls.

**NEW HOUSES COMPLETED : NUMBER, AUSTRALIA.(a)**  
(Including Owner-built Houses.)

Material of Outer Walls.	1953-54.	1954-55. (b)	1955-56. (b)	1956-57. (b)	1957-58. (b)
Brick, Brick Veneer, Concrete and Stone ..	22,008	23,901	23,523	21,956	25,876
Wood (Weatherboard, etc.) .. .. .	31,347	31,050	29,389	25,670	26,854
Fibro Cement .. .. .	21,631	24,501	22,071	17,408	17,864
Other .. .. .	412	386	553	506	585
<b>Total .. .. .</b>	<b>75,398</b>	<b>79,838</b>	<b>75,536</b>	<b>65,540</b>	<b>71,179</b>

(a) Excludes Northern Territory prior to 1954-55.

(b) Includes Northern Territory flats.

3. **New Flats.**—The figures in the foregoing tables, except those for the Northern Territory, do not include particulars of new flats. The summary below shows the number of new flats commenced, completed and under construction in each State and Territory for the years 1953-54 to 1957-58. It should be noted: (i) that the figures are additional to the numbers of houses shown in other tables, (ii) that each flat is counted as a separate unit, and the numbers shown therefore relate to individual flats, and (iii) that new flats only are included, i.e., the conversions of old buildings into flats are omitted.

**NEW FLATS : NUMBER.**  
(Individual Flats.)

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>COMMENCED.</b>									
1953-54 ..	801	739	204	158	451	58	(a)	28	2,439
1954-55 ..	782	1,183	278	72	380	85	(b)	130	2,910
1955-56 ..	879	715	215	131	353	34	(b)	326	2,653
1956-57 ..	844	1,110	280	295	153	69	(b)	260	3,011
1957-58 ..	1,668	1,283	295	499	234	85	(b)	16	4,080
<b>COMPLETED.</b>									
1953-54 ..	1,011	689	156	99	212	13	(a)	..	2,180
1954-55 ..	701	781	309	105	316	48	(b)	12	2,272
1955-56 ..	776	1,273	200	86	584	49	(b)	..	2,968
1956-57 ..	861	897	174	230	365	105	(b)	264	2,896
1957-58 ..	1,331	1,104	331	372	171	41	(b)	56	3,406
<b>UNDER CONSTRUCTION AT END OF YEAR.</b>									
1953-54 ..	678	735	123	115	474	46	(a)	28	2,199
1954-55 ..	739	1,137	92	82	538	85	(b)	146	2,819
1955-56 ..	830	579	107	121	312	70	(b)	472	2,491
1956-57 ..	765	792	213	184	100	34	(b)	468	2,556
1957-58 ..	1,094	971	177	311	163	78	(b)	428	3,222

(a) Not available.

(b) Not available for publication. Included with houses.

4. Value of New Buildings.—(i) *Commenced, Completed and Under Construction, 1953-54 to 1957-58.* The following table summarizes the values of all new buildings commenced, completed and under construction in each State and Territory.

**NEW BUILDINGS : VALUE.**  
(Including Estimated Value of Owner-built Houses.)  
(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
COMMENCED.									
1953-54 ..	a 109,103	89,689	27,839	25,649	26,369	9,224	(b)	2,856	a 290,729
1954-55 ..	121,351	102,693	32,073	29,946	35,458	10,836	1,605	5,932	339,894
1955-56 ..	133,257	121,416	35,024	43,202	26,972	9,889	2,300	4,708	376,768
1956-57 ..	135,798	109,334	37,841	31,888	22,241	14,138	1,765	5,959	358,964
1957-58 ..	137,189	122,133	37,128	35,659	25,065	12,735	2,259	8,588	380,756
COMPLETED.									
1953-54 ..	101,545	86,720	25,913	26,108	25,785	9,692	(b)	3,878	279,641
1954-55 ..	110,694	98,932	28,318	27,081	34,096	10,649	1,653	2,943	314,366
1955-56 ..	124,138	111,594	30,519	33,717	33,678	12,798	1,935	4,287	352,666
1956-57 ..	133,094	114,830	35,383	33,997	23,424	12,609	2,285	5,940	361,562
1957-58 ..	169,240	131,756	38,043	38,047	27,262	12,840	2,110	5,841	425,139
UNDER CONSTRUCTION AT END OF YEAR.									
1953-54 ..	a 104,895	103,081	19,699	23,730	25,701	11,782	(b) •	7,249	a 296,137
1954-55 ..	117,498	112,055	23,446	26,854	29,102	12,399	1,573	10,643	333,570
1955-56 ..	132,693	128,525	28,210	36,996	25,550	9,864	1,967	11,240	375,045
1956-57 ..	138,792	127,943	31,332	36,792	26,217	12,085	1,555	11,520	386,236
1957-58 ..	113,548	122,750	30,968	35,337	24,587	11,946	1,745	14,589	355,470

(a) Partly estimated.

(b) Not available.

(ii) *Completed, 1957-58.* The following table shows the value of all new buildings completed in each State and Territory during 1957-58, according to the kind of building. It should be remembered that all values shown exclude the value of land and represent the estimated value of buildings on completion.

**NEW BUILDINGS COMPLETED : VALUE, 1957-58.**  
(Including Estimated Value of Owner-built Houses.)  
(£'000.)

Kind of Building.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Houses—</b>									
Brick, Brick Veneer, Concrete and Stone	23,948	31,313	2,490	21,223	13,483	2,267	165	3,242	98,131
Wood (Weatherboard, etc.)	24,891	35,009	13,738	401	71	5,400	(a)	(a)	79,631
Fibro Cement	28,594	2,650	3,681	3,070	4,701	128	998	14	43,836
Other	125	1,310	195	9	8	..	(a)	(a)	1,662
<i>Total, Houses</i>	<i>77,538</i>	<i>70,282</i>	<i>20,104</i>	<i>24,703</i>	<i>18,263</i>	<i>7,795</i>	<i>(b) 1,201</i>	<i>3,354</i>	<i>223,260</i>
Flats ..	3,088	2,914	619	870	356	127	(c)	264	8,238
Hotels, Guest Houses, etc. ..	3,587	1,400	851	605	193	(a)	(a)	(a)	6,768
Shops ..	5,744	3,666	1,867	750	874	404	98	185	13,588
Factories ..	33,252	19,219	2,175	2,518	1,263	1,064	234	158	59,883
<b>Business Premises—</b>									
Office ..	17,765	9,043	1,857	1,732	1,953	870	65	393	33,678
Other ..	6,320	5,348	2,066	1,689	935	776	61	107	17,302
Educational ..	6,828	7,600	1,577	1,343	555	593	192	942	19,630
Religious ..	1,502	1,510	706	504	405	91	..	107	4,825
Health ..	5,973	6,753	3,671	2,214	1,109	(a)	(a)	..	19,889
Entertainment and Recreation	4,533	1,334	1,448	563	737	130	(a)	(a)	8,815
Miscellaneous ..	3,090	2,687	1,102	556	619	793	143	273	9,263
<i>Total, Other Buildings</i>	<i>91,682</i>	<i>61,474</i>	<i>17,939</i>	<i>13,344</i>	<i>8,999</i>	<i>5,045</i>	<i>909</i>	<i>2,487</i>	<i>201,879</i>
<b>Total, New Buildings</b>	<b>169,240</b>	<b>131,756</b>	<b>38,043</b>	<b>38,047</b>	<b>27,262</b>	<b>12,840</b>	<b>2,110</b>	<b>5,841</b>	<b>425,139</b>

(a) Not available for publication.

(b) Includes flats.

(c) Included with houses.

(iii) *Completed, 1953-54 to 1957-58.* The following table shows the value of all new buildings completed in Australia.

**NEW BUILDINGS COMPLETED : VALUE.**  
(Including Estimated Value of Owner-built Houses.)  
(£'000.)

Kind of Building.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>Houses—</b>					
Brick, Brick Veneer, Concrete and Stone..	73,304	82,917	86,336	84,505	98,131
Wood (Weatherboard, etc.) .. ..	75,187	79,100	80,473	74,361	79,631
Fibro Cement .. ..	44,813	54,141	51,184	42,286	43,836
Other .. ..	1,020	1,013	1,443	1,339	1,662
<b>Total, Houses</b> .. ..	<b>194,324</b>	<b>217,171</b>	<b>219,436</b>	<b>202,491</b>	<b>223,260</b>
<b>Flats</b> .. ..	<b>4,797</b>	<b>4,944</b>	<b>6,824</b>	<b>7,245</b>	<b>8,238</b>
Hotels, Guest Houses, etc. .. ..	3,417	3,683	6,309	8,239	6,768
Shops .. ..	8,297	10,724	12,604	12,527	13,588
Factories .. ..	24,088	24,606	38,234	43,253	59,883
<b>Business Premises—</b>					
Office .. ..			8,841	16,827	33,678
Other .. ..			14,633	18,863	17,302
Educational .. ..			15,716	14,840	19,630
Religious .. ..			2,409	3,507	4,825
Health .. ..			10,058	13,113	19,889
Entertainment and Recreation .. ..			4,104	9,481	8,815
Miscellaneous .. ..			13,498	11,176	9,263
<b>Total, Other Buildings</b> .. ..	<b>85,317</b>	<b>97,195</b>	<b>133,230</b>	<b>159,071</b>	<b>201,879</b>
<b>Total, New Buildings</b> .. ..	<b>279,641</b>	<b>314,366</b>	<b>352,666</b>	<b>361,562</b>	<b>425,139</b>

5. **Persons engaged in New Building.**—(i) *At 30th June, 1958.* The following table shows the number of contractors, sub-contractors and wage earners engaged on jobs carried out by builders of new buildings at 30th June, 1958, and also shows the numbers of these persons engaged in the main building occupations as at that date.

**PERSONS ENGAGED ON JOBS CARRIED OUT BY BUILDERS OF NEW BUILDINGS, 30th JUNE, 1958.**

(Excluding Persons working on Owner-built Houses.)

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Contractors (a) ..	3,188	2,456	1,877	674	590	427	33	84	9,329
Sub-contractors (a) ..	4,762	4,077	1,798	1,851	1,277	517	64	216	14,562
Wage earners .. ..	24,723	25,101	14,211	8,162	7,057	3,516	273	2,682	85,725
<b>Total</b> .. ..	<b>32,673</b>	<b>31,634</b>	<b>17,886</b>	<b>10,687</b>	<b>8,924</b>	<b>4,460</b>	<b>370</b>	<b>2,982</b>	<b>109,616</b>
Carpenters .. ..	12,952	12,636	8,374	3,088	2,964	2,025	185	838	43,062
Bricklayers .. ..	2,939	3,000	1,057	1,651	1,017	288	37	284	10,273
Painters .. ..	2,802	2,947	1,337	927	851	335	30	374	9,803
Electricians .. ..	1,875	1,425	845	500	510	230	20	119	5,524
Plumbers .. ..	3,013	2,541	1,331	818	785	265	27	169	8,949
Builders' Labourers .. ..	5,077	4,690	2,842	1,832	1,717	818	49	603	17,628
Other .. ..	4,015	4,395	1,900	1,871	1,080	499	22	595	14,377
<b>Total</b> .. ..	<b>32,673</b>	<b>31,634</b>	<b>17,886</b>	<b>10,687</b>	<b>8,924</b>	<b>4,460</b>	<b>370</b>	<b>2,982</b>	<b>109,616</b>

(a) *Actually working on jobs.*

(ii) *Summary, 1954 to 1958.* The number of persons (including contractors and sub-contractors actually working on jobs) engaged in each State and Territory on jobs carried out by builders of new buildings is shown in the following table.

**PERSONS ENGAGED ON JOBS CARRIED OUT BY BUILDERS OF NEW BUILDINGS.**

(Excluding Persons working on Owner-built Houses.)

At 30th June—	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
1954 ..	33,574	28,476	17,269	10,038	9,245	4,826	(b)	1,341	104,769
1955 ..	34,981	32,396	18,655	10,876	10,437	5,904	425	1,913	115,587
1956 (c) ..	37,300	32,306	19,427	11,258	9,080	4,620	464	1,957	116,412
1957 (d) ..	37,337	30,543	18,425	11,036	9,439	4,684	384	2,004	113,852
1958 ..	32,673	31,634	17,886	10,687	8,924	4,460	370	2,982	109,616

(a) Excludes Northern Territory prior to 1955. (b) Not available. (c) At 29th June.  
(d) At 28th June.

#### § 4. Census Dwellings.

1. **Number of Dwellings.**—The following table shows the number of occupied and unoccupied dwellings in the urban and rural areas of Australia at the Census of 30th June, 1954. (For definitions of "urban" and "rural" see para. 4, p. 283). As explained therein, the boundaries of the Metropolitan Urban and other divisions of State differ from census to census, and consequently accurate comparison cannot be made between figures for corresponding divisions. Moreover, the inclusion in the Other Urban Division in 1954 of the larger towns not separately incorporated has further reduced comparability. These factors should be borne in mind when referring to tables in this section showing divisions of State.

Occupied dwellings are classified into private and other dwellings (see para. 2, p. 383, for definitions of "private" and "other" dwellings). The term "unoccupied dwellings" is not synonymous with vacant houses and flats available for occupancy, but refers mainly to "week-end", holiday and other dwellings whose usual occupants were temporarily absent on the night of the Census; newly-completed dwellings awaiting occupancy are also included.

The total number of occupied dwellings in Australia at the Census of 30th June, 1954, showed an increase of 24.8 per cent. over the corresponding figure for the 1947 Census, compared with an increase of 18.6 per cent. in population. Occupied private dwellings increased by 25.1 per cent. and occupied dwellings other than private by 7.8 per cent. At the 1954 Census, 98.4 per cent. of the total occupied dwellings in Australia were private dwellings, compared with 98.2 per cent. in 1947. Proportional increases in total occupied dwellings over 1947 figures in each State and Territory were:—New South Wales 22.3 per cent., Victoria 25.3 per cent., Queensland 24.7 per cent., South Australia 27.7 per cent., Western Australia 30.5 per cent., Tasmania 26.1 per cent., Australian Capital Territory 96.9 per cent., and Northern Territory 27.1 per cent.

Unoccupied dwellings increased by 139 per cent.

#### DWELLINGS: AUSTRALIA, CENSUS, 30th JUNE, 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Division.	Occupied.				Unoccupied.	
	Private.	Other than Private.	Total.		Number.	Proportion of Total. (Per Cent.)
			Number.	Proportion of Total. (Per Cent.)		
Urban—						
Metropolitan ..	1,309,188	19,203	1,328,391	55.81	32,984	29.30
Other ..	568,679	9,075	577,754	24.27	33,477	29.73
Rural ..	465,554	8,654	474,208	19.92	46,133	40.97
<b>Total ..</b>	<b>2,343,421</b>	<b>36,932.</b>	<b>2,380,353</b>	<b>100.00</b>	<b>112,594</b>	<b>100.00</b>

The total numbers of occupied and unoccupied dwellings in each State and Territory at the Censuses of 1947 and 1954 were as follows:—

**DWELLINGS : STATES AND TERRITORIES, 1947 AND 1954.**

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

State or Territory.	Census, 30th June, 1947.		Census, 30th June, 1954.	
	Occupied.	Unoccupied.	Occupied.	Unoccupied.
New South Wales .. .. .	746,343	17,392	912,877	42,831
Victoria .. .. .	527,406	11,412	660,690	27,491
Queensland .. .. .	272,045	9,647	339,328	21,473
South Australia .. .. .	168,538	3,547	215,301	8,524
Western Australia .. .. .	124,767	2,606	162,823	6,614
Tasmania .. .. .	62,484	2,351	78,789	5,288
Northern Territory .. .. .	2,697	34	3,427	47
Australian Capital Territory .. .. .	3,615	52	7,118	326
<b>Australia .. .. .</b>	<b>1,907,895</b>	<b>47,041</b>	<b>2,380,353</b>	<b>112,594</b>

The numbers of occupied dwellings in the External Territories at the 1954 Census were as follows:—Norfolk Island, 310; Papua, 1,605; Trust Territory of New Guinea, 3,098; Trust Territory of Nauru, 99.

2. *Class of Dwelling.*—The following table shows the number of the various classes of occupied dwellings in the Metropolitan Urban, Other Urban and Rural Areas of Australia at the Censuses of 1947 and 1954. Definitions of the several classes of dwellings are as follows:—

*Private dwellings* comprise private houses (including sheds, huts, garages, etc. used for dwelling purposes), shares of private houses, flats, and rooms, apartments, etc. In previous censuses, dwellings returned on the Schedules as sheds, huts, garages, etc. were included with private houses. For the Census of 1954, particulars of these dwellings were tabulated separately, but have been included with private houses to preserve continuity with past census results. Separate particulars were shown in the 1947 Census publications for private houses which were shared by two or more family units and for which only one Householder's Schedule was received, but in 1954 these dwellings were included with private houses.

*Share of private house* is a portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was furnished.

*Flat* is part of a house or other building which can be completely closed off and which includes both cooking and bathing facilities.

*Other private dwelling* is an apartment, room(s), etc., which is part of a building, but which is not a self-contained unit.

*Dwellings other than private* include hotels, boarding houses, lodging houses, hostels, hospitals, educational, religious and charitable institutions, defence and penal establishments, etc.

It is desirable when considering the question of housing to exclude those forms of accommodation which do not represent the normal housing conditions associated with family life, and the statistics which follow relate mainly to private dwellings only.

## OCCUPIED DWELLINGS ACCORDING TO CLASS, AUSTRALIA, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Class of Occupied Dwelling.	Census, 30th June, 1947.				Census, 30th June, 1954.				Increase, 1947-54.
	Urban.(a)		Rural. (a)	Total, Australia.	Urban.(a)		Rural. (a)	Total, Australia.	
	Metro-politan.	Other.			Metro-politan.	Other.			
Private House(b)— House Shed, Hut, etc. }	760,678	289,898	567,476	1,618,052	1,067,674 14,259	506,128 12,276	433,069 22,613	2,006,871 49,148	} 437,967
Total ..	760,678	289,898	567,476	1,618,052	1,081,933	518,404	455,682	2,056,019	
Share of Private House(c)	72,724	19,627	13,660	106,011	77,344	22,747	7,125	107,216	1,205
Flat .. .. .	94,822	12,697	3,880	111,399	104,603	20,784	2,033	127,420	16,021
Other .. .. .	33,263	3,855	1,043	38,161	45,308	6,744	714	52,766	14,605
<b>Total Private Dwellings</b>	<b>961,487</b>	<b>326,077</b>	<b>586,059</b>	<b>1,873,623</b>	<b>1,309,188</b>	<b>568,679</b>	<b>465,554</b>	<b>2,343,421</b>	<b>469,798</b>
Caretaker's Quarters ..	1,110	279	352	1,741	998	264	194	1,456	-285
Licensed Hotel ..	1,686	1,776	2,854	6,316	1,720	2,457	2,015	6,192	-124
Boarding House, etc. ..	15,302	3,367	2,512	21,181	14,110	4,120	1,041	19,271	-1,910
Educational Institution	449	290	389	1,128	523	488	251	1,262	134
Religious Institution (non-educational) ..	85	21	42	148	142	31	24	197	49
Hospital .. .. .	543	368	593	1,504	559	517	353	1,429	-75
Charitable Institution (other than Hospital)	206	72	128	406	299	107	104	510	104
Other .. .. .	552	293	1,003	1,848	852	1,091	4,672	6,615	4,767
<b>Total Dwellings Other than Private</b> ..	<b>19,933</b>	<b>6,466</b>	<b>7,873</b>	<b>34,272</b>	<b>19,203</b>	<b>9,075</b>	<b>8,654</b>	<b>36,932</b>	<b>2,660</b>
<b>Total Occupied Dwellings</b> .. .. .	<b>981,420</b>	<b>332,543</b>	<b>593,932</b>	<b>1,907,895</b>	<b>1,328,391</b>	<b>577,754</b>	<b>474,208</b>	<b>2,380,353</b>	<b>472,458</b>
Total Occupied Dwellings per square mile	711.92	121.89	0.20	0.64	592.88	123.44	0.16	0.80	0.16
Wagon, Van, etc. (including campers-out)	847	1,029	3,997	5,873	2,693	3,605	5,383	11,681	5,808

(a) See letterpress on p. 382 regarding comparability as between Censuses.

(b) Includes shared private

houses for which only one Householder's Schedule was received.

(c) Portion of a shared private house which

was occupied separately and for which portion a separate Householder's Schedule was received.

NOTE.—Minus sign (—) denotes decrease.

3. Population According to Class of Dwelling, etc.—The following table shows the number of the various classes of occupied dwellings at the Censuses of 1947 and 1954, together with the number of inmates therein.

Of the total population in 1954, 92.52 per cent. were living in private dwellings—houses, flats, apartments, rooms, etc.—whilst 672,168 persons, or 7.48 per cent. of the population, spent the night in other than private dwellings, or on ships, trains or aircraft or were camping out.

## OCCUPIED DWELLINGS, ETC. AND INMATES, AUSTRALIA, 1947 AND 1954.

(EXCLUDING FULL-BLOOD ABORIGINALS AND DWELLINGS OCCUPIED SOLELY BY THEM.)

Particulars.	Census, 30th June, 1947.			Census, 30th June, 1954.		
	Number of Dwellings.	Inmates.		Number of Dwellings.	Inmates.	
		Number.	Proportion of Total. (Per Cent.)		Number.	Proportion of Total. (Per Cent.)
Private House(a)—						
House .. .. .	1,618,052	6,323,621	83.43	2,006,871	7,448,978	82.89
Shed, Hut, etc. .. .. .					134,187	1.49
Total .. .. .	1,618,052	6,323,621	83.43	2,056,019	7,583,165	84.38
Share of Private House(b) ..	106,011	303,996	4.01	107,216	290,579	3.23
Flat .. .. .	111,399	316,115	4.17	127,420	329,265	3.67
Other .. .. .	38,161	83,028	1.10	52,766	111,353	1.24
Total Private Dwellings ..	1,873,623	7,026,760	92.71	2,343,421	8,314,362	92.52
Dwellings Other than Private	34,272	520,204	6.86	36,932	618,743	6.89
Total Occupied Dwellings ..	1,907,895	7,546,964	99.57	2,380,353	8,933,105	99.41
Wagon, Van, etc. .. .. .	5,873	13,791	0.18	11,681	30,056	0.33
Migratory(c) .. .. .	..	18,603	0.25	..	23,369	0.26
Total .. .. .	..	7,579,358	100.00	..	8,986,530	100.00

(a) Includes shared private houses for which only one Householder's Schedule was received.

(b) Portion of a shared private house which was occupied separately and for which portion a separate Householder's Schedule was received.

(c) Shipping, railway and air travellers.

4. Occupied Private Dwellings.—(i) *Material of Outer Walls.* In the following table, occupied private dwellings are classified according to the material of which the outer walls were built.

Wood has been the most extensively used material in the construction of the outer walls, followed by brick and fibro cement, and in 1954 the respective proportions for Australia for occupied private dwellings for which the material of the outer walls was specified were—wood, 44.4 per cent., brick, 33.5 per cent. and fibro cement, 12.7 per cent. The latter has shown a most spectacular increase since 1933, when the proportion was 1.6 per cent. (23,696 dwellings), compared with 6.3 per cent. in 1947 (117,631 dwellings). The proportions of both brick and wooden dwellings have shown small decreases since 1947. The numbers of dwellings of all other materials except fibro cement and concrete have decreased. Brick dwellings in 1954 represented 51.5 per cent. of all occupied private dwellings in the Metropolitan Urban Divisions, whilst in the Other Urban and Rural Divisions wooden dwellings predominated, the percentages of such dwellings being 60.0 per cent. and 59.4 per cent. respectively.

### OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO MATERIAL OF OUTER WALLS, AUSTRALIA, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Material of Outer Walls.	Census, 30th June, 1947.				Census, 30th June, 1954.				Increase, 1947-54.
	Urban.(a)		Rural. (a)	Total, Australia.	Urban.(a)		Rural. (a)	Total, Australia.	
	Metro-politan.	Other.			Metro-politan.	Other.			
Brick ..	551,618	60,215	38,179	650,012	674,165	86,254	25,089	785,508	135,496
Stone ..	36,714	13,409	37,573	87,696	35,907	18,049	33,604	87,560	136
Concrete ..	10,442	5,411	13,283	29,136	24,299	13,497	13,639	51,435	22,299
Wood ..	315,567	204,863	364,221	884,651	422,010	341,145	276,584	1,039,739	155,088
Iron, Tin ..	6,087	14,498	45,347	65,932	7,387	19,652	31,177	58,216	7,716
Fibro Cement ..	31,924	23,586	62,121	117,631	140,542	84,835	71,176	296,553	178,922
Calico, Canvas, Hessian ..	656	1,539	13,255	15,450	426	1,843	5,446	7,715	7,735
Other ..	4,430	1,774	9,902	16,106	3,644	2,686	7,750	14,080	2,026
Not Stated ..	4,049	782	2,178	7,009	808	718	1,089	2,615	4,394
<b>Total ..</b>	<b>961,487</b>	<b>326,077</b>	<b>586,059</b>	<b>1,873,623</b>	<b>1,309,188</b>	<b>568,679</b>	<b>465,554</b>	<b>2,343,421</b>	<b>469,798</b>

(a) See letterpress on p. 382 regarding comparability as between Censuses.

NOTE.—Minus sign (—) denotes decrease.

(ii) *Number of Rooms.* For Census purposes, the kitchen and any permanently enclosed sleep-out were included in the number of rooms in the dwelling, but the bathroom, pantry, laundry and storehouse were excluded unless generally used for sleeping.

Excluding houses with rooms unspecified, private houses of four, five and six rooms represented 78.3 per cent. of the total number of private houses in Australia at 30th June, 1954, compared with 79.2 per cent. in 1947, and three-quarters of the total increase in the number of private houses since 1947 consisted of houses containing these numbers of rooms. Houses of seven and more rooms also showed substantial increases.

### OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER OF ROOMS, AUSTRALIA, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Number of Rooms(a) per Dwelling.	Census, 30th June, 1947.					Census, 30th June, 1954.				
	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwellings.	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwellings.
<b>METROPOLITAN URBAN.(d)</b>										
1 ..	2,913	9,547	1,055	11,263	24,778	5,383	9,353	678	15,186	30,600
2 ..	5,493	17,360	5,850	13,035	41,738	17,177	17,018	5,723	16,126	56,044
3 ..	27,929	18,433	20,505	5,495	72,362	39,250	18,164	21,614	7,841	86,869
4 ..	153,385	13,917	37,406	1,923	206,631	192,237	13,477	40,911	3,176	249,801
5 ..	271,401	7,776	20,338	508	300,023	377,643	9,176	23,221	1,175	411,215
6 ..	203,942	3,539	6,967	210	214,658	302,004	5,734	9,073	594	317,405
7 ..	61,279	1,106	1,572	35	63,992	96,252	2,095	2,098	193	100,638
8 ..	20,078	317	470	9	20,874	31,608	869	685	92	33,254
9 ..	6,888	103	147	1	7,139	10,562	264	213	41	11,080
10 and over ..	5,826	49	86	..	5,961	8,841	111	83	14	9,049
Not Stated ..	1,544	577	426	784	3,331	976	1,083	304	870	3,233
<b>Total Private Dwellings ..</b>	<b>760,678</b>	<b>72,724</b>	<b>94,822</b>	<b>33,263</b>	<b>961,487</b>	<b>1,081,933</b>	<b>77,344</b>	<b>104,603</b>	<b>45,308</b>	<b>1,309,188</b>
<b>Average number of Rooms per Private Dwelling ..</b>	<b>5.28</b>	<b>3.15</b>	<b>4.07</b>	<b>2.02</b>	<b>4.89</b>	<b>5.32</b>	<b>3.37</b>	<b>4.16</b>	<b>2.15</b>	<b>5.00</b>

For footnotes see next page.

## OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER OF ROOMS, AUSTRALIA, 1947 AND 1954—continued.

Number of Rooms(a) per Dwelling.	Census, 30th June, 1947.					Census, 30th June, 1954.				
	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwellings.	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwellings.
<b>OTHER URBAN.(d)</b>										
1 .. ..	3,788	2,418	85	956	7,247	5,693	2,232	81	1,068	9,074
2 .. ..	5,014	4,788	901	1,396	12,099	11,669	5,446	1,453	2,374	20,942
3 .. ..	10,860	4,903	3,285	904	19,952	20,429	5,854	5,121	1,907	33,311
4 .. ..	61,611	3,902	4,671	390	70,574	98,504	4,254	7,910	899	111,567
5 .. ..	107,482	2,208	2,610	83	112,383	186,088	2,565	4,098	293	193,044
6 .. ..	69,714	873	803	37	71,427	132,573	1,399	1,522	84	135,578
7 .. ..	20,211	249	182	4	20,646	41,366	485	392	24	42,267
8 .. ..	6,470	77	60	..	6,607	13,373	163	112	6	13,654
9 .. ..	2,158	29	20	..	2,207	4,336	56	28	6	4,426
10 and over ..	1,543	13	12	..	1,568	3,208	32	12	3	3,255
Not Stated ..	1,047	167	68	85	1,367	1,165	261	55	80	1,561
<b>Total Private Dwellings ..</b>	<b>289,898</b>	<b>19,627</b>	<b>12,697</b>	<b>3,855</b>	<b>326,077</b>	<b>518,404</b>	<b>22,747</b>	<b>20,784</b>	<b>6,744</b>	<b>568,679</b>
<b>Average number of Rooms a per Private Dwelling ..</b>	<b>5.12</b>	<b>3.15</b>	<b>3.99</b>	<b>2.30</b>	<b>4.92</b>	<b>5.18</b>	<b>3.31</b>	<b>4.03</b>	<b>2.61</b>	<b>5.04</b>
<b>RURAL.(d)</b>										
1 .. ..	23,808	1,340	33	160	25,341	12,976	544	10	82	13,612
2 .. ..	21,942	3,279	325	314	25,860	16,271	1,297	157	175	17,900
3 .. ..	37,929	3,608	1,048	324	42,909	27,458	1,698	535	207	29,898
4 .. ..	134,898	2,959	1,353	182	139,392	89,397	1,553	727	175	91,852
5 .. ..	163,621	1,509	741	40	165,911	128,313	987	382	52	129,734
6 .. ..	110,130	570	246	5	110,951	99,843	530	157	9	100,539
7 .. ..	41,390	184	63	1	41,638	43,694	208	35	1	43,938
8 .. ..	16,619	63	37	..	16,719	19,111	98	9	2	19,220
9 .. ..	6,089	20	6	..	6,115	7,532	21	3	..	7,556
10 and over ..	7,095	26	2	..	7,123	8,759	20	3	1	8,783
Not Stated ..	3,955	102	26	17	4,100	2,328	169	15	10	2,522
<b>Total Private Dwellings ..</b>	<b>567,476</b>	<b>13,660</b>	<b>3,880</b>	<b>1,043</b>	<b>586,059</b>	<b>455,682</b>	<b>7,125</b>	<b>2,033</b>	<b>714</b>	<b>465,554</b>
<b>Average number of Rooms a per Private Dwelling ..</b>	<b>4.90</b>	<b>3.23</b>	<b>3.95</b>	<b>2.66</b>	<b>4.85</b>	<b>5.19</b>	<b>3.62</b>	<b>4.00</b>	<b>2.91</b>	<b>5.16</b>
<b>TOTAL, AUSTRALIA.</b>										
1 .. ..	30,509	13,305	1,173	12,379	57,366	24,052	12,129	769	16,336	53,286
2 .. ..	32,449	25,427	7,076	14,745	79,697	45,117	23,761	7,333	18,675	94,886
3 .. ..	76,718	26,944	24,838	6,723	135,223	87,137	25,716	27,270	9,955	150,078
4 .. ..	349,894	20,778	43,430	2,495	416,597	380,138	19,284	49,548	4,250	453,220
5 .. ..	542,504	11,493	23,689	631	578,317	692,044	12,728	27,701	1,520	733,993
6 .. ..	383,786	4,982	8,016	252	397,036	534,420	7,663	10,752	687	553,522
7 .. ..	122,880	1,539	1,817	40	126,276	181,312	2,788	2,525	218	186,843
8 .. ..	43,167	457	567	9	44,200	64,092	1,130	806	100	66,128
9 .. ..	15,135	152	173	1	15,461	22,430	341	244	47	23,062
10 and over ..	14,464	88	100	..	14,652	20,808	163	98	18	21,087
Not Stated ..	6,546	846	520	886	8,798	4,469	1,513	374	960	7,316
<b>Total Private Dwellings ..</b>	<b>1,618,052</b>	<b>106,011</b>	<b>111,399</b>	<b>38,161</b>	<b>1,873,623</b>	<b>2,056,019</b>	<b>107,216</b>	<b>127,420</b>	<b>52,766</b>	<b>2,343,421</b>
<b>Average number of Rooms a per Private Dwelling ..</b>	<b>5.12</b>	<b>3.16</b>	<b>4.06</b>	<b>2.07</b>	<b>4.88</b>	<b>5.26</b>	<b>3.38</b>	<b>4.14</b>	<b>2.22</b>	<b>5.04</b>

(a) Includes kitchen and permanently enclosed sleep-out but does not include bathroom, pantry, laundry or storehouse, unless generally used for sleeping. (b) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (c) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received. (d) See letterpress on p. 382 regarding comparability as between Censuses.

(iii) *Number of Inmates.* A classification of occupied private dwellings according to the number of inmates is shown in the following table.

For Australia as a whole, private houses with four inmates were most numerous, followed very closely by those with two and three inmates in that order.

An increase of nearly 51 per cent. (149,348 houses) in the number of private houses occupied by two inmates brought this group from third position in 1947 to second position in 1954. Houses with two inmates in 1954 constituted 22 per cent. of the total number of occupied private houses in Australia, about the same proportion as for houses with four inmates. In 1947, houses with two inmates constituted 18 per cent. of the total and houses with four inmates 21 per cent. Houses with three inmates constituted 21 per cent. at both the 1947 and 1954 Censuses. The average number of inmates in private houses was 3.69 in 1954, compared with 3.91 in 1947.

The number of private houses which were shared, and for each share of which a separate Householder's Schedule was furnished, increased slightly between 1947 and 1954, but the average number of inmates therein decreased from 2.87 to 2.71. Separate particulars of shared houses for which only one Householder's Schedule was furnished were not compiled in 1954. These particulars are included with private houses in all tables in this section.

Flats and other classes of private dwellings increased in both numbers and total inmates, but the average number of inmates fell from 2.84 to 2.58 for flats and from 2.18 to 2.11 for others.

In flats those with two inmates and in other classes of occupied private dwellings those with one inmate predominated.

### OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER OF INMATES, AUSTRALIA, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Number of Inmates per Dwelling.	Census, 30th June, 1947.					Census, 30th June, 1954.				
	Private House. (a)	Share of Private House. (b)	Flat.	Other.	Total Private Dwellings.	Private House. (a)	Share of Private House. (b)	Flat.	Other.	Total Private Dwellings.
<b>METROPOLITAN URBAN.(c)</b>										
1 .. ..	29,205	12,110	12,158	12,232	65,705	62,022	16,509	19,345	19,203	117,079
2 .. ..	135,257	24,144	33,104	11,357	203,862	242,815	26,497	41,373	14,300	324,985
3 .. ..	172,288	17,901	25,646	5,689	221,524	241,859	16,400	23,793	6,356	288,408
4 .. ..	178,144	10,193	14,827	2,404	205,568	247,207	9,917	12,926	3,295	273,345
5 .. ..	117,858	4,562	5,812	977	129,209	153,006	4,449	4,743	1,229	163,427
6 .. ..	64,385	2,098	2,051	339	68,873	75,493	2,033	1,604	488	79,618
7 .. ..	32,669	985	775	153	34,582	33,245	891	549	218	34,903
8 .. ..	16,973	496	306	70	17,845	15,107	448	186	125	15,866
9 .. ..	6,911	146	80	23	7,160	5,983	115	55	53	6,206
10 and over	6,988	89	63	19	7,159	5,196	85	29	41	5,351
<b>Total Private Dwellings ..</b>	<b>760,678</b>	<b>72,724</b>	<b>94,822</b>	<b>33,263</b>	<b>961,487</b>	<b>1,081,933</b>	<b>77,344</b>	<b>104,603</b>	<b>45,308</b>	<b>1,309,188</b>
<b>Total Inmates ..</b>	<b>3,008,429</b>	<b>203,390</b>	<b>265,259</b>	<b>70,594</b>	<b>3,547,672</b>	<b>3,944,181</b>	<b>204,571</b>	<b>264,646</b>	<b>92,576</b>	<b>4,505,974</b>
<b>Average number of Inmates per Private Dwelling ..</b>	<b>3.95</b>	<b>2.80</b>	<b>2.80</b>	<b>2.12</b>	<b>3.69</b>	<b>3.65</b>	<b>2.64</b>	<b>2.53</b>	<b>2.04</b>	<b>3.44</b>

For footnotes see next page.

OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER OF INMATES, AUSTRALIA, 1947 AND 1954—continued.

Number of Inmates per Dwelling.	Census, 30th June, 1947.					Census, 30th June, 1954.				
	Private House. (a)	Share of Private House. (b)	Flat.	Other.	Total Private Dwellings.	Private House. (a)	Share of Private House. (b)	Flat.	Other.	Total Private Dwellings.
<b>OTHER URBAN.(c)</b>										
1 .. ..	18,520	2,838	1,229	941	23,528	39,178	4,609	2,945	1,883	48,615
2 .. ..	53,774	6,107	4,043	1,326	65,250	112,952	7,231	7,333	2,211	129,727
3 .. ..	60,924	4,853	3,328	870	69,975	107,678	4,986	5,085	1,389	119,138
4 .. ..	61,336	2,889	2,318	424	66,967	110,022	3,056	3,161	756	116,995
5 .. ..	42,519	1,477	1,021	174	45,191	73,416	1,479	1,383	278	76,556
6 .. ..	24,827	734	406	64	26,031	39,436	768	557	132	40,893
7 .. ..	13,595	377	203	33	14,208	18,961	353	211	51	19,376
8 .. ..	7,636	219	89	17	7,961	9,348	166	60	21	9,595
9 .. ..	3,266	69	34	4	3,373	3,777	56	32	11	3,876
10 and over ..	3,501	64	26	2	3,593	3,636	43	17	12	3,708
<b>Total Private Dwellings ..</b>	<b>289,898</b>	<b>19,627</b>	<b>12,697</b>	<b>3,855</b>	<b>326,077</b>	<b>518,404</b>	<b>22,747</b>	<b>20,784</b>	<b>6,744</b>	<b>568,679</b>
<b>Total Inmates ..</b>	<b>1,140,137</b>	<b>58,651</b>	<b>38,823</b>	<b>9,579</b>	<b>1,247,190</b>	<b>1,913,307</b>	<b>63,029</b>	<b>58,201</b>	<b>16,430</b>	<b>2,050,967</b>
<b>Average number of Inmates per Private Dwelling ..</b>	<b>3.93</b>	<b>2.99</b>	<b>3.06</b>	<b>2.48</b>	<b>3.82</b>	<b>3.69</b>	<b>2.77</b>	<b>2.80</b>	<b>2.44</b>	<b>3.61</b>
<b>RURAL.(c)</b>										
1 .. ..	60,330	1,922	357	187	62,796	46,108	964	217	105	47,394
2 .. ..	105,800	3,788	1,190	337	111,115	88,412	1,898	597	167	91,074
3 .. ..	109,182	3,444	1,050	284	113,960	86,142	1,534	473	139	88,308
4 .. ..	107,455	2,296	693	116	110,560	89,458	1,285	381	134	91,258
5 .. ..	78,714	1,141	335	73	80,263	65,284	745	209	71	66,309
6 .. ..	48,670	577	155	21	49,423	39,762	370	102	34	40,268
7 .. ..	27,531	283	57	15	27,886	20,749	185	36	25	20,995
8 .. ..	15,958	147	29	9	16,143	10,788	90	10	14	10,902
9 .. ..	6,487	29	6	..	6,524	4,508	36	5	3	4,552
10 and over ..	7,349	33	8	1	7,389	4,471	18	3	2	4,494
<b>Total Private Dwellings ..</b>	<b>567,476</b>	<b>13,660</b>	<b>3,880</b>	<b>1,043</b>	<b>586,059</b>	<b>455,682</b>	<b>7,125</b>	<b>2,033</b>	<b>714</b>	<b>465,554</b>
<b>Total Inmates ..</b>	<b>2,175,055</b>	<b>41,955</b>	<b>12,033</b>	<b>2,855</b>	<b>2,231,898</b>	<b>1,725,677</b>	<b>22,979</b>	<b>6,418</b>	<b>2,347</b>	<b>1,757,421</b>
<b>Average number of Inmates per Private Dwelling ..</b>	<b>3.83</b>	<b>3.07</b>	<b>3.10</b>	<b>2.74</b>	<b>3.81</b>	<b>3.79</b>	<b>3.23</b>	<b>3.16</b>	<b>3.29</b>	<b>3.77</b>
<b>TOTAL, AUSTRALIA.</b>										
1 .. ..	108,055	16,870	13,744	13,360	152,029	147,308	22,082	22,507	21,191	213,088
2 .. ..	294,831	34,039	38,337	13,020	380,227	444,179	35,626	49,303	16,678	545,786
3 .. ..	342,394	26,198	30,024	6,843	405,459	435,679	22,920	29,351	7,904	495,854
4 .. ..	346,935	15,378	17,838	2,944	383,095	446,687	14,258	16,468	4,185	481,598
5 .. ..	239,091	7,180	7,168	1,224	254,663	291,706	6,673	6,335	1,578	306,292
6 .. ..	137,882	3,409	2,612	424	144,327	154,691	3,171	2,263	654	160,779
7 .. ..	73,795	1,645	1,035	201	76,676	72,955	1,429	796	294	75,474
8 .. ..	40,567	862	424	96	41,949	35,243	704	256	160	36,363
9 .. ..	16,664	244	122	27	17,057	14,268	207	92	67	14,634
10 and over ..	17,838	186	95	22	18,141	13,303	146	49	55	13,553
<b>Total Private Dwellings ..</b>	<b>1,618,052</b>	<b>106,011</b>	<b>111,399</b>	<b>38,161</b>	<b>1,873,623</b>	<b>2,056,019</b>	<b>107,216</b>	<b>127,420</b>	<b>52,766</b>	<b>2,343,421</b>
<b>Total Inmates ..</b>	<b>6,323,621</b>	<b>303,996</b>	<b>316,115</b>	<b>83,028</b>	<b>7,026,760</b>	<b>7,583,165</b>	<b>290,579</b>	<b>329,265</b>	<b>111,353</b>	<b>8,314,362</b>
<b>Average number of Inmates per Private Dwelling ..</b>	<b>3.91</b>	<b>2.87</b>	<b>2.84</b>	<b>2.18</b>	<b>3.75</b>	<b>3.69</b>	<b>2.71</b>	<b>2.58</b>	<b>2.11</b>	<b>3.55</b>

(a) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (b) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received. (c) See letterpress on p. 382 regarding comparability as between Censuses.

(iv) *Nature of Occupancy.* At the 1954 Census, 52.5 per cent. of occupied private houses in Australia for which particulars were supplied were occupied by owners, 16.8 per cent. by purchasers by instalments, 28.1 per cent. by tenants, and 2.6 per cent. by others. The corresponding percentages in 1947 were—owners, 50.5 per cent; purchasers by instalments, 9.0 per cent; tenants, 37.6 per cent; and others, 2.9 per cent. Owner-occupied houses in Australia increased by 33.4 per cent. between 1947 and 1954, and those being purchased by instalments by 139.3 per cent., the increase in these two groups combined being nearly 50 per cent., while tenant-occupied houses decreased by 4.1 per cent.

In the Metropolitan Areas, 70.5 per cent. of all occupied private houses for which particulars were supplied were either owner-occupied or being purchased by instalments, as compared with 69.0 per cent. in the Other Urban areas, and 66.9 per cent. in the Rural Areas.

Tenants occupied by far the greater proportion of flats and other private dwellings.

### OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NATURE OF OCCUPANCY, AUSTRALIA, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Nature of Occupancy.	Census, 30th June, 1947.					Census, 30th June, 1954.				
	Private House. (a)	Share of Private House. (b)	Flat.	Other.	Total Private Dwellings.	Private House. (a)	Share of Private House. (b)	Flat.	Other.	Total Private Dwellings.
<b>METROPOLITAN URBAN.(c)</b>										
Owner .. .. .	325,942	13,401	8,368	617	348,328	512,632	19,525	12,272	1,899	546,328
Purchaser by Instalments .. .. .	95,232	2,562	370	86	98,250	249,018	5,777	1,503	481	256,779
Tenant (Governmental Housing)(d) .. .. .	328,974	55,776	84,889	31,890	501,529	48,011	379	4,127	1,795	54,312
Tenant .. .. .						259,955	50,133	85,530	40,267	435,885
Caretaker .. .. .	4,350	305	624	228	5,507	6,617	449	681	391	8,138
Other Methods of Occupancy .. .. .	2,694	129	290	202	3,315	3,682	448	322	211	4,663
Not Stated .. .. .	3,486	551	281	240	4,558	2,018	633	168	264	3,083
<i>Total Private Dwellings</i> .. .. .	<i>760,678</i>	<i>72,724</i>	<i>94,822</i>	<i>33,263</i>	<i>961,487</i>	<i>1,081,933</i>	<i>77,344</i>	<i>104,603</i>	<i>45,308</i>	<i>1,309,188</i>
<b>OTHER URBAN.(c)</b>										
Owner .. .. .	146,329	4,091	1,677	141	152,238	279,042	6,469	3,271	426	289,208
Purchaser by Instalments .. .. .	25,712	580	84	16	26,392	77,063	1,158	280	70	78,571
Tenant (Governmental Housing)(d) .. .. .	109,027	14,448	10,712	3,594	137,781	27,414	115	712	83	28,324
Tenant .. .. .						122,146	14,367	16,214	6,043	158,770
Caretaker .. .. .	3,685	159	109	48	4,001	5,715	186	184	67	6,152
Other Methods of Occupancy .. .. .	2,232	53	53	13	2,351	4,440	150	81	28	4,699
Not Stated .. .. .	2,913	296	62	43	3,314	2,584	302	42	27	2,955
<i>Total Private Dwellings</i> .. .. .	<i>289,898</i>	<i>19,627</i>	<i>12,697</i>	<i>3,855</i>	<i>326,077</i>	<i>518,404</i>	<i>22,747</i>	<i>20,784</i>	<i>6,744</i>	<i>568,679</i>

For footnotes see next page.

## OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NATURE OF OCCUPANCY, AUSTRALIA, 1947 AND 1954—continued.

Nature of Occupancy.	Census, 30th June, 1947.					Census, 30th June, 1954.				
	Private House. (a)	Share of Private House. (b)	Flat.	Other.	Total Private Dwellings.	Private House. (a)	Share of Private House. (b)	Flat.	Other.	Total Private Dwellings.
<b>RURAL.(c)</b>										
Owner .. ..	333,131	3,641	635	52	337,459	283,022	2,778	431	47	286,278
Purchaser by Instalments .. ..	22,650	330	49	6	23,035	17,544	164	33	2	17,743
Tenant (Governmental Housing)(d) .. ..	160,572	8,801	3,107	960	173,440	16,543	66	96	35	16,740
Tenant .. ..						99,712	3,464	1,398	625	105,199
Caretaker .. ..	17,528	257	43	10	17,838	12,975	137	23	2	13,137
Other Methods of Occupancy .. ..	15,645	189	17	4	15,855	19,163	271	32	2	19,468
Not Stated .. ..	17,950	442	29	11	18,432	6,723	245	20	1	6,989
<b>Total Private Dwellings .. ..</b>	<b>567,476</b>	<b>13,660</b>	<b>3,880</b>	<b>1,043</b>	<b>586,059</b>	<b>455,682</b>	<b>7,125</b>	<b>2,033</b>	<b>714</b>	<b>465,554</b>

## TOTAL, AUSTRALIA.

Owner .. ..	805,402	21,133	10,680	810	838,025	1,074,696	28,772	15,974	2,372	1,121,814
Purchaser by Instalments .. ..	143,594	3,472	503	108	147,677	343,625	7,099	1,816	553	353,093
Tenant (Governmental Housing)(d) .. ..	598,573	79,025	98,708	36,444	812,750	91,968	560	4,935	1,913	99,376
Tenant .. ..						481,813	67,964	103,142	46,935	699,854
Caretaker .. ..	25,563	721	776	286	27,346	25,307	772	888	460	27,427
Other Methods of Occupancy .. ..	20,571	371	360	219	21,521	27,285	869	435	241	28,830
Not Stated .. ..	24,349	1,289	372	294	26,304	11,325	1,180	230	292	13,027
<b>Total Private Dwellings .. ..</b>	<b>1,618,052</b>	<b>106,011</b>	<b>111,399</b>	<b>38,161</b>	<b>1,873,623</b>	<b>2,056,019</b>	<b>107,216</b>	<b>127,420</b>	<b>52,766</b>	<b>2,343,421</b>

(a) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (b) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received. (c) See letterpress on p. 382 regarding comparability as between Censuses. (d) These figures were compiled from the answers furnished in response to the instruction on the Householder's Schedule "Tenant paying rent to a Government Authority to write 'Tenant (G)'".

(v) *Weekly Rent.* (a) *All Tenanted Private Dwellings.* The following table shows tenanted private dwellings in the Metropolitan Urban, Other Urban and Rural Areas of Australia classified according to weekly rent (unfurnished).

Information tabulated concerning rents was restricted to the actual rent paid per week by tenants for unfurnished private dwellings. Particulars of rents shown in the following tables are therefore on an *unfurnished* basis. Dwellings shown as rent "Not Stated" include those whose rents were shown on Householders' Schedules on a *furnished* basis, and those whose rents were not applicable (e.g., for shop and dwelling combined). In this section information on "tenanted private dwellings" relating to the 1954 Census *excludes particulars of dwellings occupied by "Tenants" (Governmental Housing) in each State, i.e., those who furnished answers in response to the instruction on the Census Householder's Schedule "Tenant paying rent to a Government Authority to write 'Tenant (G)'"*. For the Australian Capital Territory and the Northern Territory, particulars of all tenanted private dwellings are included. Particulars for the 1947 Census relate throughout to all tenanted private dwellings.

**TENANTED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO WEEKLY RENT (UNFURNISHED), AUSTRALIA, 1947 AND 1954.**

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Weekly Rent (Unfurnished).	Census, 30th June, 1947.				Census, 30th June, 1954.(a)				
	Private House. (b)	Share of Private House.(c)	Flat.	Total Tenanted Private Dwellings. (d)	Private House. (b)	Share of Private House.(c)	Flat.	Other.	Total Tenanted Private Dwellings.
<b>METROPOLITAN URBAN.(e)</b>									
Under 5s. ..	303	77	20	456	206	64	29	70	369
5s. and under 10s. ..	2,992	1,157	110	4,664	1,290	238	51	97	1,676
10s. " " 15s. ..	22,678	4,551	626	28,903	8,292	1,231	171	403	10,097
15s. " " 20s. ..	44,526	4,984	1,847	53,095	16,680	1,486	461	556	19,183
20s. " " 25s. ..	68,155	7,272	5,342	82,739	33,203	3,634	1,582	1,191	39,610
25s. " " 30s. ..	67,162	6,308	8,520	83,418	36,380	3,037	3,252	1,144	43,813
30s. " " 35s. ..	48,973	4,979	13,045	67,933	37,612	4,573	6,332	1,541	50,058
35s. " " 40s. ..	23,343	2,201	12,468	38,456	25,523	2,298	8,371	837	37,029
40s. " " 50s. ..	15,745	1,636	14,242	31,958	34,047	4,517	16,250	1,470	56,284
50s. " " 60s. ..	4,778	467	5,489	10,854	14,278	2,327	10,642	855	28,102
60s. " " 70s. ..	1,883	151	2,226	4,309	9,327	1,523	6,294	584	17,728
70s. " " 80s. ..	702	45	1,047	1,815	4,287	602	3,163	286	8,338
80s. " " 90s. ..	446	11	621	1,084	2,679	421	2,199	167	5,466
90s. " " 100s. ..	206	9	271	487	940	116	1,283	66	2,405
100s. and over ..	440	10	679	1,125	2,877	282	3,398	165	6,722
Not Stated ..	26,642	21,918	18,336	90,229	36,062	23,900	22,259	30,844	113,065
<b>Total Tenanted Private Dwellings ..</b>	<b>328,974</b>	<b>55,776</b>	<b>84,889</b>	<b>501,529</b>	<b>263,683</b>	<b>50,249</b>	<b>85,737</b>	<b>40,276</b>	<b>439,945</b>
<b>Average Weekly Rent (Unfurnished) per Private Dwelling..</b>	<b>25s. 9d.</b>	<b>23s. 6d.</b>	<b>37s. 9d.</b>	<b>27s. 5d.</b>	<b>34s. 10d.</b>	<b>35s. 8d.</b>	<b>51s. 11d.</b>	<b>37s. 4d.</b>	<b>38s. 3d.</b>

**OTHER URBAN.(e)**

Under 5s. ..	775	85	1	876	369	33	13	25	440
5s. and under 10s. ..	3,404	714	48	4,296	2,026	190	18	61	2,295
10s. " " 15s. ..	13,840	1,670	249	15,940	6,946	596	109	136	7,787
15s. " " 20s. ..	18,751	1,385	584	20,876	9,304	544	226	141	10,215
20s. " " 25s. ..	24,555	1,894	1,651	28,365	15,650	1,159	594	282	17,685
25s. " " 30s. ..	18,296	1,305	1,331	21,092	14,109	896	914	294	16,213
30s. " " 35s. ..	10,582	784	1,225	12,659	15,744	1,360	1,346	316	18,766
35s. " " 40s. ..	3,312	213	685	4,237	8,448	501	1,001	214	10,164
40s. " " 50s. ..	2,148	131	641	2,940	13,140	1,181	1,834	321	16,476
50s. " " 60s. ..	477	26	183	691	6,649	578	1,181	192	8,600
60s. " " 70s. ..	155	8	43	206	4,462	287	659	97	5,505
70s. " " 80s. ..	56	4	10	70	1,938	75	391	37	2,441
80s. " " 90s. ..	29	..	9	38	824	56	166	13	1,059
90s. " " 100s. ..	8	..	2	10	264	19	69	4	356
100s. and over ..	12	..	..	12	553	28	123	12	716
Not Stated ..	12,627	6,229	4,050	25,473	22,188	6,865	7,603	3,903	40,559
<b>Total Tenanted Private Dwellings ..</b>	<b>109,027</b>	<b>14,448</b>	<b>10,712</b>	<b>137,781</b>	<b>122,614</b>	<b>14,368</b>	<b>16,247</b>	<b>6,048</b>	<b>159,277</b>
<b>Average Weekly Rent (Unfurnished) per Private Dwelling ..</b>	<b>21s. 6d.</b>	<b>19s. 3d.</b>	<b>27s. 9d.</b>	<b>21s. 8d.</b>	<b>31s. 11d.</b>	<b>31s. 1d.</b>	<b>41s. 10d.</b>	<b>32s. 6d.</b>	<b>32s. 8d.</b>

For footnotes see next page.

TENANTED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO WEEKLY RENT (UNFURNISHED), AUSTRALIA, 1947 AND 1954—continued.

Weekly Rent (Unfurnished).	Census, 30th June, 1947.				Census, 30th June, 1954.(a)				
	Private House. (b)	Share of Private House.(c)	Flat.	Total Tenanted Private Dwellings. (d)	Private House. (b)	Share of Private House.(c)	Flat.	Other.	Total Tenanted Private Dwellings.
<b>RURAL.(e)</b>									
Under 5s.	5,758	137	4	5,915	1,266	29	8	7	1,310
5s. and under 10s.	19,212	758	40	20,063	6,437	132	15	9	6,593
10s. " " 15s.	30,873	1,276	199	32,405	10,356	240	36	49	10,681
15s. " " 20s.	21,598	877	288	22,816	7,920	177	54	19	8,170
20s. " " 25s.	19,506	977	428	20,951	11,644	282	129	81	12,136
25s. " " 30s.	9,469	444	301	10,257	5,850	147	88	27	6,112
30s. " " 35s.	5,075	247	213	5,557	5,622	190	95	36	5,943
35s. " " 40s.	1,315	57	76	1,450	1,670	49	42	11	1,772
40s. " " 50s.	1,109	49	89	1,249	3,682	129	96	24	3,931
50s. " " 60s.	318	7	26	351	1,560	58	51	14	1,683
60s. " " 70s.	134	3	2	146	981	20	27	5	1,033
70s. " " 80s.	28	2	2	32	359	8	7	1	375
80s. " " 90s.	21	..	1	2	248	4	5	2	259
90s. " " 100s.	2	..	..	2	75	2	..	..	77
100s. and over	14	..	..	14	206	6	2	..	214
Not Stated	46,140	3,987	1,431	52,214	42,003	1,991	745	340	45,079
<b>Total Tenanted Private Dwellings ..</b>	<b>160,572</b>	<b>8,801</b>	<b>3,107</b>	<b>173,440</b>	<b>99,879</b>	<b>3,464</b>	<b>1,400</b>	<b>625</b>	<b>105,368</b>
<b>Average Weekly Rent (Unfurnished) per Private Dwelling ..</b>	<b>15s. 6d.</b>	<b>15s. 11d.</b>	<b>23s. 4d.</b>	<b>15s. 7d.</b>	<b>22s. 0d.</b>	<b>23s. 4d.</b>	<b>30s. 10d.</b>	<b>25s. 2d.</b>	<b>22s. 2d.</b>

TOTAL, AUSTRALIA.

Under 5s.	6,836	299	25	7,247	1,841	126	50	102	2,119
5s. and under 10s.	25,608	2,629	198	29,023	9,753	560	84	167	10,564
10s. " " 15s.	67,391	7,497	1,074	77,248	25,594	2,067	316	588	28,565
15s. " " 20s.	84,875	7,246	2,719	96,787	33,904	2,207	741	716	37,568
20s. " " 25s.	112,216	10,123	7,421	132,055	60,497	5,075	2,305	1,554	69,431
25s. " " 30s.	94,927	8,057	10,152	114,763	56,339	4,080	4,254	1,465	66,138
30s. " " 35s.	64,630	6,010	14,483	86,149	58,978	6,123	7,773	1,893	74,767
35s. " " 40s.	27,970	2,471	13,229	44,143	35,641	2,848	9,414	1,062	48,965
40s. " " 50s.	19,002	1,816	14,972	36,147	50,869	5,827	18,180	1,815	76,691
50s. " " 60s.	5,573	500	5,698	11,896	22,487	2,963	11,874	1,061	38,385
60s. " " 70s.	2,172	162	2,278	4,661	14,770	1,830	6,980	686	24,266
70s. " " 80s.	786	51	1,059	1,917	6,584	685	3,561	324	11,154
80s. " " 90s.	496	11	631	1,144	3,751	481	2,370	182	6,784
90s. " " 100s.	216	9	273	499	1,279	137	1,352	70	2,838
100s. and over	466	10	679	1,155	3,636	316	3,523	177	7,652
Not Stated	85,409	32,134	23,817	167,916	100,253	32,756	30,607	35,087	198,703
<b>Total Tenanted Private Dwellings ..</b>	<b>598,573</b>	<b>79,025</b>	<b>98,708</b>	<b>812,750</b>	<b>486,176</b>	<b>68,081</b>	<b>103,384</b>	<b>46,949</b>	<b>704,590</b>
<b>Average Weekly Rent (Unfurnished) per Private Dwelling ..</b>	<b>22s. 8d.</b>	<b>22s. 0d.</b>	<b>36s. 7d.</b>	<b>24s. 2d.</b>	<b>32s. 2d.</b>	<b>34s. 2d.</b>	<b>50s. 6d.</b>	<b>36s. 2d.</b>	<b>35s. 0d.</b>

(a) The figures shown for 1954 exclude dwellings occupied by "Tenants" (Governmental Housing), except those in the Northern Territory and the Australian Capital Territory. (b) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (c) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received. (d) Includes "other private dwellings" not shown in the table. (e) See letterpress on p. 382 regarding comparability as between Censuses.

At the 1947 Census, nearly 83 per cent. of the tenanted private houses in Australia shown in the table above had weekly rentals of between 10s. and 35s.; at the 1954 Census, only 61 per cent. were within these limits. In 1947, 6 per cent. had rentals below 10s. and 11 per cent. above 35s. In 1954, 3 per cent. had rentals below 10s. and 36 per cent. above 35s. At the 1947 Census, 88 per cent. of the flats shown for Australia had rentals of between £1 and £3 a week, 5 per cent. were below this range, and 7 per cent. above it. At the 1954 Census, the corresponding proportions were:—74 per cent., 2 per cent. and 24 per cent. Dwellings whose rents were not stated were excluded in obtaining these proportions.

The average rentals shown in this table for all tenanted private dwellings in Australia at the 1954 Census were 45 per cent. higher than in 1947 (42 per cent. higher for houses and 38 per cent. higher for flats). Metropolitan rentals in 1954 were higher by 40 per cent., 35 per cent. and 38 per cent., respectively, than in 1947.

In all such comparisons as these, the difference in basis between the 1947 and 1954 Censuses, referred to in the opening paragraph above, and also the differences in the Urban and Rural divisions (*see p. 382*), should be borne in mind.

(b) *Tenanted Private Houses of Three to Six Rooms.* The comparisons in the following table, restricted to houses of three to six rooms, with outside walls of wood, brick or stone, are of particular interest, since this group comprises more than three-quarters of all tenanted private houses in Australia.

**AVERAGE WEEKLY RENT(a) PER ROOM OF TENANTED PRIVATE HOUSES, THREE TO SIX ROOMS, WITH WALLS OF WOOD, BRICK OR STONE, AUSTRALIA, 1947 AND 1954.**

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Particulars.	Census, 30th June, 1947.				Census, 30th June, 1954.				Increase, 1947-54. (Australia.)
	Urban.		Rural.	Total, Australia.	Urban.		Rural.	Total, Australia.	
	Metropolitan.	Other.			Metropolitan.	Other.			
Private Houses(a) with Walls of—	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
<b>Wood—</b>									
3 rooms .. ..	5 1	5 1	3 10	4 7	7 3	7 11	5 10	7 1	2 6
4 " .. ..	5 0	4 7	3 5	4 4	6 9	7 0	4 10	6 4	2 0
5 " .. ..	4 9	4 3	3 3	4 2	6 8	6 4	4 6	6 1	1 11
6 " .. ..	4 5	3 10	2 11	3 10	5 10	5 5	3 11	5 3	1 5
3 to 6 rooms ..	4 9	4 3	3 3	4 1	6 6	6 3	4 6	5 11	1 10
<b>Brick or Stone—</b>									
3 rooms .. ..	5 7	5 7	4 5	5 6	8 3	9 4	6 8	8 3	2 9
4 " .. ..	5 9	5 0	3 8	5 7	7 10	7 2	5 1	7 8	2 1
5 " .. ..	5 6	4 9	3 8	5 3	7 2	6 8	4 9	7 0	1 9
6 " .. ..	5 4	4 6	3 6	5 1	6 9	6 1	4 3	6 6	1 5
3 to 6 rooms ..	5 6	4 9	3 8	5 4	7 3	6 8	4 9	7 1	1 9
<b>Wood, Brick or Stone—</b>									
3 rooms .. ..	5 5	5 3	3 11	5 1	7 11	8 4	6 0	7 9	2 8
4 " .. ..	5 6	4 8	3 6	5 0	7 6	7 1	4 11	7 1	2 1
5 " .. ..	5 3	4 4	3 4	4 9	7 0	6 5	4 6	6 6	1 9
6 " .. ..	5 0	4 1	3 1	4 6	6 5	5 7	4 0	5 11	1 5
3 to 6 rooms ..	5 3	4 5	3 4	4 9	7 0	6 5	4 7	6 7	1 10

(a) Rents relate to tenanted private houses (one family) in 1947 and to tenanted private houses, excluding those occupied by "Tenants" (Governmental Housing) in each State, in 1954.

The average rent of 3- to 6-roomed tenanted private houses of wood, brick or stone increased by about 40 per cent. between 1947 and 1954 (wood by 46 per cent. and brick by 34 per cent.). The average for 3-roomed tenanted houses of wood, brick or stone increased by about 53 per cent., 4-roomed houses by about 42 per cent., 5-roomed houses by about 39 per cent., and 6-roomed houses by 33 per cent. The increases in respect of houses of wood were higher than those for brick or stone in each case. The increases in the Metropolitan Areas were relatively lower than for Australia as a whole.

(vi) *Date of Building.* The numbers of occupied private dwellings in Australia at the Census of 30th June, 1954, classified according to date of building, were as follows:— Built before 30th June, 1947, 1,758,448; 1st July–31st December, 1947, 19,742; 1948, 60,360; 1949, 63,897; 1950, 78,965; 1951, 85,852; 1952, 91,712; 1953, 88,467; 1954, 44,725; built after 30th June, 1947 but particular year not stated, 19,641; not stated, 31,612; total, 2,343,421.

(vii) *Facilities, etc.* At the 1947 Census, a detailed question was asked concerning facilities, and a summary of the information obtained therefrom was published on page 571 of Official Year Book No. 38. The question asked at the 1954 Census was much less detailed, and was designed partly to clarify replies to the question on class of dwelling. Information obtained in reply to this question and to that on farm dwellings in 1954 was not compiled.

## CHAPTER XII.

## LABOUR, WAGES AND PRICES.

NOTE.—Reference is made in this chapter to retail and wholesale price indexes. For particulars of the Export Price Index, see Chapter XIII., § 15, and of the Farm Production Price Index, see Chapter XXX., § 2.

## A. RETAIL PRICES AND PRICE INDEXES.

## § 1. General.

The information on retail prices and price indexes presented in this chapter is extracted from the annual *Labour Report*. For a full explanation of methods adopted and an analysis of problems involved see the detailed reference in Chapter I. of *Labour Report* No. 45, 1957.

Retail prices of food and groceries and average rentals of houses for years extending back to 1901 were collected by the Commonwealth Statistician, and in some cases have been recorded by the Statisticians of various States for earlier years.

Retail prices of a more extensive range of commodities (including clothing) and certain services in common demand have been ascertained at frequent and regular intervals since 1923 for each of the six capital cities and for 27 of the more important towns of Australia. Comparable information is available for the month of November in each year from 1914 to 1922 for each of the six capital cities. The list of items priced for index purposes is published in *Labour Report* No. 45.

## § 2. Previous Retail Price Indexes.

1. General.—Four series of retail price indexes had been compiled at various times for Australia by the Commonwealth Statistician prior to 1954. Each of these was continued until changed conditions required the compilation of indexes more directly relevant to current conditions. The respective indexes were:—

- (i) *The "A" Series Index* (covering food, groceries and house rents) was first compiled in 1912 with the year 1911 as base = 1,000. It was discontinued in June, 1938.
- (ii) *The "B" Series Index* (covering food, groceries and rent of 4 and 5 roomed houses) was first compiled in 1925 and continued until the December Quarter, 1953. It was the food and rent constituent of the "C" Series Index and was designed to replace the "A" Series Index for general statistical purposes.
- (iii) *The "C" Series Index* (covering food and groceries, rent of 4 and 5 roomed houses, clothing, household drapery, household utensils, fuel, lighting, fares, smoking and some other miscellaneous items) was first compiled in 1921 and published at quarterly intervals from the June Quarter, 1922. It was used by the Commonwealth Court of Conciliation and Arbitration for purposes of quarterly wage adjustments from May, 1934, to August, 1953. Some State tribunals use or consider it in their proceedings. Its publication in mimeograph each quarter will be continued for the present in the customary form and on its customary basis. For general statistical purposes it has been replaced by the Interim Retail Price Index (1952–53 base year) described at length in a Statistical Bulletin published on 24th March, 1954, and briefly in the following section of this chapter.
- (iv) *The "D" Series Index*, derived by combining the "A" and "C" Series Indexes, was used by the Commonwealth Court of Conciliation and Arbitration from May, 1933 to May, 1934, and then discontinued.

Of the four retail price indexes described above, only the "C" Series is now compiled. The new Interim Index will continue in its present form until the components of certain groups are finalized.

2. *The "Court" Index*.—In 1937, the Commonwealth Court of Conciliation and Arbitration introduced a "Court" Index for the purpose of its system of making automatic quarterly adjustments to the basic wage within its jurisdiction. By decision of the Court the "Court" Index ceased to be issued by the Industrial Registrar as at the December Quarter, 1953. "Court" index numbers were an arithmetical conversion of the "C" Series Index.

### § 3. The Interim Retail Price Index (1952-53 Base Year).

1. **Origin of the Interim Retail Price Index (1952-53 Base Year).**—The list of component items and the weighting pattern of the “C” Series Retail Price Index were first adopted in 1921 but were reviewed by Conference of Statisticians in 1936. (*See Labour Report No. 41, 1952, page 33.*)

From the outbreak of war in 1939 to late in 1948, periodic policy changes in regard to various war-time controls (including rationing) caused recurrent changes in consumption and the pattern of expenditure. This rendered it impracticable either to produce a new index or to revise the old one on any basis that would render the index more representative, than it already was, of the changing pattern.

When commodity rationing had virtually ceased in the latter part of 1948, action was taken by the Statistician to collect price data of about 100 additional items and to gather information as to current consumption and expenditure patterns. By the middle of 1949 a considerable number of new price series were coming into being and the body of data available as to expenditure and consumption (in the post-rationing period) was beginning to indicate something of the new weighting pattern likely to be appropriate for post-war review of the components and construction of the “C” Series Index.

There supervened in the next two years conditions which caused wide price dispersion, a very rapid rise in prices and a new sequence of changes in consumption and the pattern of wage earner expenditure. Under these conditions it was not possible to devise any new weighting pattern for the years 1949-50, 1950-51 and 1951-52 likely to be better suited to the index or more continuously representative of conditions then current than was the existing “C” Series Index on the 1936 revision. Conference of Statisticians therefore deferred revision of the weighting system and component items of the “C” Series Index until it was advised by the Acting Commonwealth Statistician in June, 1953 (a) that although the aggregate “C” Series Index (as verified by supplementary indexes) was still reasonably reliable for current use, some of the component groups (more particularly food and miscellaneous) were not satisfactory individually; and (b) that the time had arrived either to produce a new index or to reconstruct the “C” Series Index extensively.

The Interim Retail Price Index has been compiled pursuant to Resolution 13 of Conference of Statisticians in June, 1953, reading:—

“ 13. Retail Price Indexes—

- (a) That in view of the persistence of recurrent changes in the pattern of consumer expenditure in the post-war period, it is undesirable to make a general revision of the list of items and weighting system of the “C” Series Retail Price Index at present, unless industrial tribunals expressly desire some revision for special purposes.
- (b) That an Interim Retail Price Index be compiled with putative weights and components representative, as nearly as may be, of the post-war pattern of consumer usage and expenditure.
- (c) That, having regard to the complexities of the problem and the limit of staff resources available, such interim index relate only to each capital city and to the six capital cities combined.
- (d) That attention be drawn again to the statement already published that the “C” Series Retail Price Index cannot measure changes in relative retail price levels as between capital cities consistently with its main purpose of measuring periodic changes in retail price levels for each city.
- (e) That the problem of measuring comparative retail price levels as between cities at any point of time differs in principle from the problem of measuring periodic variations in price level in an individual city”.

The Interim Retail Price Index (1952-53 base year) is used as the current retail price index in statistical publications of the Commonwealth Statistician for general statistical purposes. It relates only to six capital cities of Australia because it is not practicable with existing staff resources to collect price data for the greatly enlarged list of items for 28 other cities and towns. These continue to be covered as to the less extensive list of items used for the “C” Series Index.

At times appreciable disparities appear in the movement of the respective indexes for individual cities from quarter to quarter. The Interim Index, being based on recent weights and an extended list of items, is the more representative measure of current quarterly retail price variations.

2. **Definition of the Interim Retail Price Index.**—This index provides the interim results of researches designed to measure retail price variations (with 1952-53 = 100 as base year) on the basis of:—

- (a) a current pattern of wage earner expenditure using recent consumption weights for foods and recent expenditure weights for combining groups of items into the aggregate index;
- (b) a wider range of commodities and services than that covered by any existing price index in order to provide greater representativeness; and
- (c) individual city weights for such items as electricity, gas and fares.

The components and weighting of the Interim Retail Price Index are being reviewed in the light of data derived from the census of retail sales as to consumer expenditure on various kinds of goods, estimates of consumer expenditure on services relevant to construction of a retail price index of this type and data as to rents and housing derived from the Census of 30th June, 1954 and additional special surveys. It is proposed to cast the index into final form as soon as possible and this may entail some revision in the index.

3. **Differences between the Structure of the Interim Retail Price Index and the "C" Series Retail Price Index.**—The main differences between the structure of the Interim Retail Price Index and that of the "C" Series Retail Price Index are (a) the group weights and item weights of the Interim Index relate broadly to the consumption pattern 1950-53, while those of the "C" Series Index relate to pre-war years; and (b) the Interim Index includes a large number of items not included in the "C" Series Index.

A full list of the items used in the Interim Index was shown in Appendix III. of the Statistical Bulletin of 24th March, 1954, and on pages 9-12 of *Labour Report* No. 45. The changes in structure of each group of items as adopted for the Interim Retail Price Index are summarized below.

(i) **Food Group.**—The weights of some of the main items (e.g., milk, eggs, meat, potatoes and flour) in the Interim Index are substantially different from those of the "C" Series Index. Twenty-four new items extend the group coverage over a wider field. The total number of items in the Food Group of the Interim Index is 60 as compared with 38 in the "C" Series Index. The principal new items are lamb, packaged breakfast foods, biscuits, ice cream, packet cheese, honey, sandwich spreads, coffee, cocoa, soft drinks and certain types of confectionery.

(ii) **Clothing and Drapery Group.**—In the Interim Index, 17 new items have been added to the Clothing and Drapery Group, and 25 items each formerly represented by one type of article are now each represented by two or more types. Consequential adjustments have been made in weights of individual items. The principal new items added to this group are:—sports coat, sports trousers, cardigan (and other types of knitted wear), overalls, piece-goods (rayon, cotton and woollen) and knitting wool.

(iii) **Rent Group.**—Only minor changes have been made in the Rent Group. Available data indicate (a) that, in general, very few new houses have been built by private owners for renting in the post-war years; (b) that in some cities considerable numbers of new government houses have been built for renting or occupancy on a quasi-rental basis; and (c) that there has been a substantial increase in the numbers of owner-occupied houses, including new instalment-purchase or quasi-instalment-purchase houses under governmental and private housing schemes. In recent years the difficulty of obtaining data suitable for the housing component of a price index has therefore intensified. The Census of 1954 showed that a very rapid diminution had occurred since 1947 in both the numbers and proportions of privately rented houses. Recent supplementary surveys indicate a continuation of this trend in the six capital cities. Further study is therefore being given to the hitherto intractable problems associated with measuring at quarterly intervals "housing price" variations in a form suitable for use in a retail price index in respect of owner-occupied houses, instalment-purchase houses, and houses occupied under the various types of governmental housing schemes.

(iv) **Other Groups.**—Six new sub-groups are included in the Interim Index, comprising 75 items as compared with 32 in the "C" Series Index. The principal new items are garden tools, floor coverings, shaving cream, toilet soap, etc., patent medicines, baby foods, haircuts, dry cleaning, shoe repairs, postage, etc. Necessary adjustments have been made to bring the group weight into conformity with recent expenditure and consumption patterns. The weight of this group is much greater than it was in the "C" Series Index.

(v) **Group Weights.**—The group weights in the new Interim Index have been brought into general conformity with the estimated group distribution of wage earner household expenditure in recent years over the field covered. In some cases the weights are putative weights assessed on available data and are subject to some revision.

In the year 1952-53 the ratio of the individual group "aggregate expenditure" to the "aggregate expenditure" of the whole index for the six capital cities combined was as follows:—

Group.	"C" Series Retail Price Index.	Interim Retail Price Index.
	Per cent.	Per cent.
Food .. .. .	41.0	37.1
Clothing and Drapery .. .. .	33.0	26.8
Rent .. .. .	11.3	9.0
Other Groups .. .. .	14.7	27.1
	{ 4.5 { 5.3 { 2.8 { 2.1	{ 4.6 Fuel and Light { 4.6 Household Sundries { 2.5 Certain Repairs and Services { 3.0 Cinema, Radio, Newspapers { 6.6 Rail, Tram and Bus Fares { 5.8 Tobacco and Cigarettes
	100.0	100.0

In the Interim Index common weights are adopted for all groups and items in the index for each city except in respect of fares, gas, electricity and some minor items. The resultant indexes measure price movement from period to period for each city separately. While they indicate *degree* of price movement from time to time for respective cities, they do not indicate the *relative* level of prices (or level of living costs) in each city. For that reason the Interim Index for each city in the base year 1952-53 is 100.

4. Comparison of Trends of the Interim Retail Price Index with Trends of the "C" Series Retail Price Index.—The following table shows for each of the years 1952-53 to 1957-58 and for each quarter from the December Quarter, 1955 to the December Quarter, 1958 the Interim Index for the six capital cities combined, with the year 1952-53 as base = 100, in comparison with the "C" Series Index arithmetically converted to the same base:—

Period.	Six Capital Cities: Weighted Average. (Base: Year 1952-53 = 100.)			
	"C" Series Index.		Interim Index.	
Year ended June—			A	B
1953 .. .. .	100.0		100.0	100.0
1954 .. .. .	102.8		102.2	102.5
1955 .. .. .	103.7		103.7	103.6
	A	B		
1956 .. .. .	107.5	108.8	107.0	108.0
1957 .. .. .	112.2	114.1	113.0	114.3
1958 .. .. .	114.7	114.3	115.7	115.6
Quarter ended—	A	B		
1955—December .. .. .	106.7	107.7	106.3	107.0
1956—March .. .. .	107.8	109.0	107.4	108.3
June .. .. .	109.7	111.8	109.4	110.8
September .. .. .	111.1	115.6	111.5	114.4
December .. .. .	111.7	114.2	112.5	114.2
1957—March .. .. .	112.6	112.8	113.5	113.7
June .. .. .	113.5	113.8	114.5	114.8
September .. .. .	114.0	113.8	115.1	115.1
December .. .. .	114.0	113.5	115.1	114.9
1958—March .. .. .	115.0	114.7	115.9	115.8
June .. .. .	115.9	115.3	116.7	116.5
September .. .. .	116.3	115.7	117.1	116.9
December .. .. .	117.3	117.0	118.3	118.3

NOTE.—Indexes in columns "A" exclude, and those in columns "B" include, potatoes and onions. (See para. 5 on next page.)

The figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid the distortion that would occur in rounding off the figures to the nearest whole number. Price indexes cannot measure aggregate price variations with an accuracy of the order of one-tenth of 1 per cent.

With changing conditions significant divergencies may occur between the movements shown by a retail price index (such as the "C" Series Index) constructed on pre-war weights and a comparatively limited range of major items and a retail price index (such as the Interim Index) constructed on 1950-53 weights and a broader list of items.

Due regard should be paid to the fact that a composite price index is necessarily an approximate summary which combines into one aggregate price variations of many items. Any more rigid use of the index for specific purposes is the responsibility of the bodies or persons using the indexes.

**5. Compilation of Indexes Including and Excluding Price Movement of Potatoes and Onions.**—Abnormally large seasonal fluctuations in prices of potatoes and onions had a major effect (first upwards and then downwards) on the movement of the price indexes in most cities from September Quarter, 1956 to March Quarter, 1957. The fluctuations also caused highly disparate movements in the aggregate indexes as between cities. In order to provide an indication of the recent trend of the indexes apart from these abnormally large seasonal fluctuations, index numbers excluding the effects of price movements of potatoes and onions are calculated for comparison with those which include those items.

The Interim Retail Price Index is calculated both inclusive and exclusive of potatoes and onions as from the base period 1952-53. For the "C" Series Retail Price Index, index numbers have been calculated excluding the price movement of potatoes and onions as from (and including) September Quarter, 1955.

#### § 4. Tabular Statements of Retail Price Index Numbers.

**1. General.**—Information on retail price movements is published as follows:—

(i) *Monthly.* The *Monthly Review of Business Statistics* contains annual and quarterly index numbers to the latest available date.

(ii) *Quarterly.* Statements are issued about three weeks after the end of each quarter relating to the Interim and the "C" Series Retail Price Indexes respectively for that quarter and immediately preceding quarters. The *Quarterly Summary of Australian Statistics* contains annual and quarterly index numbers to the latest available date. This publication also contains certain average prices of items of food and groceries for the latest available quarter.

(iii) *Annually.* In addition to information in this publication the annual *Labour Report* contains index numbers for past years and the quarterly results for recent years. Certain average prices for the latest year of items of food and groceries are also published in the *Labour Report*.

**2. The "C" Series Retail Price Index.**—A table of "C" Series index numbers for the weighted average of the six capital cities combined together with index numbers for each of the four main groups of items in the "C" Series Index for each year from 1914 to 1958 is shown on page 402. Detailed tables were last published in *Labour Report* No. 41, 1952, pages 19-27.

**3. The Interim Retail Price Index.**—On the following pages are published:—

(i) the Interim Retail Price index numbers for each of the years ended June from 1953 to 1958, and for each quarter during the period December Quarter, 1957 to December Quarter, 1958, for each capital city and for the six capital cities combined, together with separate indexes for each of the four groups of items (pages 400-1).

(ii) the Interim Retail Price index numbers for each of the years ended June from 1953 to 1958, and for each quarter during the period December Quarter, 1955 to December Quarter, 1958, for the weighted average of the six capital cities combined, together with separate indexes for each of the four groups of items (page 401).

## INTERIM RETAIL PRICE INDEX NUMBERS.

(Base of each Index: Year 1952-53=100.)

NOTE.—The index numbers hereunder are designed to measure aggregate variations in retail prices of specified groups of items for specified cities individually. They measure variations from time to time and not differences in price level as between cities nor comparative costs of groups of items.

City.	Year ended June, 1953.	Year ended June, 1954.	Year ended June, 1955.	Year ended June, 1956.	Year ended June, 1957.	Year ended June, 1958.	1957.		1958.				
							Dec. Qtr.	Mar. Qtr.	June. Qtr.	Sept. Qtr.	Dec. Qtr.		

## GROUP I.—FOOD (EXCLUDING POTATOES AND ONIONS).(a)

Sydney ..	100.0	101.5	104.0	106.7	111.4	113.6	111.9	115.4	114.6	113.3	113.8
Melbourne	100.0	103.8	104.7	109.9	114.2	114.9	114.3	114.8	115.1	115.3	115.2
Brisbane ..	100.0	102.2	103.4	104.7	108.4	113.3	112.5	115.0	115.8	116.0	117.6
Adelaide ..	100.0	102.5	106.3	108.7	111.1	112.2	110.7	110.9	114.2	116.0	116.9
Perth ..	100.0	106.3	109.4	111.0	115.8	115.0	113.5	114.2	115.6	116.0	114.7
Hobart ..	100.0	106.9	106.7	111.3	115.3	114.7	114.8	114.8	114.8	115.8	117.0
Six Capitals <sup>b</sup>	100.0	102.8	104.8	108.1	112.4	114.0	112.8	114.6	114.9	114.7	115.1

## GROUP I.—FOOD (INCLUDING POTATOES AND ONIONS).

Sydney ..	100.0	102.4	103.6	109.0	114.4	112.9	110.9	114.7	113.7	112.4	113.4
Melbourne	100.0	104.6	104.3	112.9	118.6	115.1	114.6	114.9	114.9	114.9	115.7
Brisbane ..	100.0	104.1	104.2	108.1	112.1	113.4	112.1	115.4	115.6	116.3	118.1
Adelaide ..	100.0	103.5	106.2	111.1	114.9	111.9	110.4	110.8	113.4	115.3	117.2
Perth ..	100.0	106.3	109.5	111.3	116.8	115.4	114.0	114.4	115.7	116.2	114.9
Hobart ..	100.0	107.7	106.8	113.6	118.3	114.4	114.2	115.1	114.2	114.8	116.6
Six Capitals <sup>b</sup>	100.0	103.7	104.6	110.6	115.8	113.7	112.4	114.4	114.4	114.2	115.1

## GROUP II.—CLOTHING AND DRAPERY.

Sydney ..	100.0	101.7	102.3	103.0	105.9	108.8	108.7	108.8	109.7	109.8	110.0
Melbourne	100.0	101.3	102.2	103.9	106.4	110.5	110.3	110.5	111.6	111.6	111.6
Brisbane ..	100.0	101.7	102.9	103.3	105.8	109.2	109.1	109.4	110.2	110.3	110.9
Adelaide ..	100.0	102.2	102.9	102.9	103.9	107.1	107.1	107.2	108.1	108.2	108.0
Perth ..	100.0	100.9	101.6	103.0	105.4	108.5	108.3	108.5	109.6	109.7	110.5
Hobart ..	100.0	102.6	103.1	104.6	107.8	110.6	110.4	110.6	111.6	111.8	112.4
Six Capitals <sup>b</sup>	100.0	101.6	102.4	103.3	105.8	109.2	109.1	109.3	110.2	110.3	110.5

## GROUP III.—RENT(c) (4 AND 5 ROOMED HOUSES).

Sydney ..	100.0	107.7	109.5	111.3	113.5	118.8	117.9	119.5	120.8	123.0	124.2
Melbourne	100.0	100.8	102.3	111.9	123.3	127.1	126.6	127.3	128.8	130.5	132.7
Brisbane ..	100.0	102.9	105.2	107.0	111.0	120.8	115.5	115.9	136.7	139.0	141.7
Adelaide ..	100.0	102.7	105.6	114.9	124.8	134.6	132.6	133.9	140.6	143.0	144.8
Perth ..	100.0	110.8	149.6	159.1	169.2	176.2	174.7	176.0	180.5	182.0	183.5
Hobart ..	100.0	108.8	109.4	126.1	151.9	160.4	158.9	161.2	164.7	166.3	168.7
Six Capitals <sup>b</sup>	100.0	105.0	109.6	115.5	122.5	128.4	127.0	128.2	132.2	134.2	136.0

## GROUP IV.—OTHER ITEMS.(d)

Sydney ..	100.0	100.5	100.9	103.6	121.5	124.8	124.8	124.8	124.8	125.3	125.5
Melbourne	100.0	100.9	101.3	109.6	116.4	117.7	117.7	117.7	118.0	119.7	127.7
Brisbane ..	100.0	103.0	104.5	110.1	117.9	120.0	119.6	120.1	121.0	121.8	125.4
Adelaide ..	100.0	99.3	99.9	103.7	107.9	111.2	111.1	111.4	111.6	112.6	112.6
Perth ..	100.0	100.8	101.9	106.4	113.7	115.8	115.7	115.8	115.9	116.4	116.6
Hobart ..	100.0	108.2	105.1	110.3	120.1	121.4	121.0	121.1	122.3	123.0	125.2
Six Capitals <sup>b</sup>	100.0	100.9	101.4	106.4	117.8	120.2	120.1	120.2	120.4	121.4	124.5

NOTE.—For footnotes see next page.

INTERIM RETAIL PRICE INDEX NUMBERS—continued.

(Base of each Index: Year 1952-53=100.)

City.	Year ended June, 1953.	Year ended June, 1954.	Year ended June, 1955.	Year ended June, 1956.	Year ended June, 1957.	Year ended June, 1958.	1957.		1958.		
							Dec. Qtr.	Mar. Qtr.	June. Qtr.	Sept. Qtr.	Dec. Qtr.
<b>ALL GROUPS (EXCLUDING POTATOES AND ONIONS).(a)</b>											
Sydney ..	100.0	101.9	103.2	105.3	113.0	116.0	115.2	116.7	116.8	116.6	117.1
Melbourne	100.0	102.1	102.9	108.4	113.5	115.5	115.2	115.5	116.1	116.8	119.2
Brisbane ..	100.0	102.3	103.7	105.9	110.3	114.5	113.6	114.8	117.3	117.9	119.8
Adelaide ..	100.0	101.6	103.6	106.3	109.5	112.6	111.8	112.1	114.2	115.4	115.9
Perth ..	100.0	103.9	109.5	112.6	117.9	119.7	118.9	119.4	120.7	121.2	121.0
Hobart ..	100.0	106.3	105.6	110.6	118.0	119.7	119.4	119.7	120.6	121.3	122.8
Six Capitals <sup>b</sup>	100.0	102.2	103.7	107.0	113.0	115.7	115.1	115.9	116.7	117.1	118.3
<b>ALL GROUPS (INCLUDING POTATOES AND ONIONS).</b>											
Sydney ..	100.0	102.2	103.1	106.1	114.1	115.7	114.8	116.4	116.4	116.2	116.9
Melbourne	100.0	102.4	102.7	109.5	115.1	115.6	115.3	115.5	116.0	116.7	119.4
Brisbane ..	100.0	103.0	104.0	107.1	111.7	114.5	113.4	114.9	117.3	118.0	120.0
Adelaide ..	100.0	102.0	103.6	107.2	110.9	112.5	111.7	112.1	114.0	115.2	116.0
Perth ..	100.0	103.9	109.6	112.7	118.3	119.8	119.1	119.4	120.7	121.2	121.1
Hobart ..	100.0	106.6	105.6	111.5	119.1	119.5	119.1	119.7	120.3	120.9	122.5
Six Capitals <sup>b</sup>	100.0	102.5	103.6	108.0	114.3	115.6	114.9	115.8	116.5	116.9	118.3

(a) See para. 5 on page 399. (b) Weighted average. (c) *Rent.*—The rent index numbers shown in the table above and elsewhere in this publication measure the proportionate rise and fall in the average weekly rentals paid for houses of four and five rooms taking corresponding houses throughout. They are "price" indexes in the strict sense, i.e., they are designed to measure only the "price" element in rent fluctuations. Rentals of new tenanted houses completed since the end of the 1939-45 war are not taken into account. (d) A group of items under the following headings—Electricity, Gas and Firewood; Household Sundries; Services; Cinema Admission, Radio Licence and Newspapers; Fares; and Tobacco and Cigarettes.

INTERIM RETAIL PRICE INDEX—GROUP INDEXES.

WEIGHTED AVERAGE OF SIX CAPITAL CITIES.

(Base : Year 1952-53 = 100.)

Period.	Food.(a)		Clothing and Drapery.	Rent.(b)	Other Items.	Aggregate All Groups.(a)	
	A	B				A	B
Year ended June—							
1953 ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1954 ..	102.8	103.7	101.6	105.0	100.9	102.2	102.5
1955 ..	104.8	104.6	102.4	109.6	101.4	103.7	103.6
1956 ..	108.1	110.6	103.3	115.5	106.4	107.0	108.0
1957 ..	112.4	115.8	105.8	122.5	117.8	113.0	114.3
1958 ..	114.0	113.7	109.2	128.4	120.2	115.7	115.6
Quarter ended—							
1955—December ..	107.0	109.0	103.4	112.0	106.2	106.3	107.0
1956—March ..	108.2	110.6	103.3	118.8	106.7	107.4	108.3
June ..	110.7	114.5	103.4	119.7	110.1	109.4	110.8
September ..	111.9	119.6	103.8	120.6	115.6	111.5	114.4
December ..	111.6	116.2	105.3	121.5	117.8	112.5	114.2
1957—March ..	112.6	113.2	106.3	123.1	118.5	113.5	113.7
June ..	113.3	114.2	107.9	124.6	119.3	114.5	114.8
September ..	113.7	113.8	108.4	126.1	119.9	115.1	115.1
December ..	112.8	112.4	109.1	127.0	120.1	115.1	114.9
1958—March ..	114.6	114.4	109.3	128.2	120.2	115.9	115.8
June ..	114.9	114.4	110.2	132.2	120.4	116.7	116.5
September ..	114.7	114.2	110.3	134.2	121.4	117.1	116.9
December ..	115.1	115.1	110.5	136.0	124.5	118.3	118.3

(a) The index in column "A" excludes, and that in column "B" includes, potatoes and onions. See para. 5 on page 399. (b) See note (c) to table above.

## § 5. The "C" Series Retail Price Index: 1914-1958.

1. *Construction.*—Full particulars relating to the construction, items, weights and method of tabulation of the "C" Series Retail Price Index were last published in *Labour Report* No. 41, 1952, pages 10-18. Tabular statements of index numbers were shown on pages 19-27 and historical particulars of the index, and its relation to automatic basic wage variations prior to 12th September, 1953, on pages 32-42.

2. *Significant Dates.*—The following table furnishes index numbers for the six capital cities as a whole for certain significant dates since November, 1914—the earliest date for which this index is available.

## "C" SERIES RETAIL PRICE INDEX NUMBERS.

## WEIGHTED AVERAGE OF SIX CAPITAL CITIES.

(Base: *Weighted Average of Six Capital Cities, 1923-27 = 1,000.*)

1914, November	..	..	..	687	(Beginning of 1914-18 War)
1918, November	..	..	..	905	(End of 1914-18 War)
1920, November	..	..	..	1,166	(Post-War peak)
1922, November	..	..	..	975	(Post-War trough)
1929, Year	..	..	..	1,033	(Pre-Depression peak)
1933, Year	..	..	..	804	(Depression trough)
1939, September Quarter	..	..	..	916	(Pre-1939-45 War)
1943, March Quarter	..	..	..	1,123	(Pre-Price Stabilization)
1943, June Quarter	..	..	..	1,143	(1939-45 War peak)
1945, September Quarter	..	..	..	1,126	(End of 1939-45 War)
1948, September Quarter	..	..	..	1,311	
1950, September Quarter	..	..	..	1,572	
1952, September Quarter	..	..	..	2,238	
1953, September Quarter	..	..	..	2,321	
1954, September Quarter	..	..	..	2,321	
1958, September Quarter	..	..	..	(a)2,630	

(a) Excludes price movement of potatoes and onions. See para. 5 on page 399.

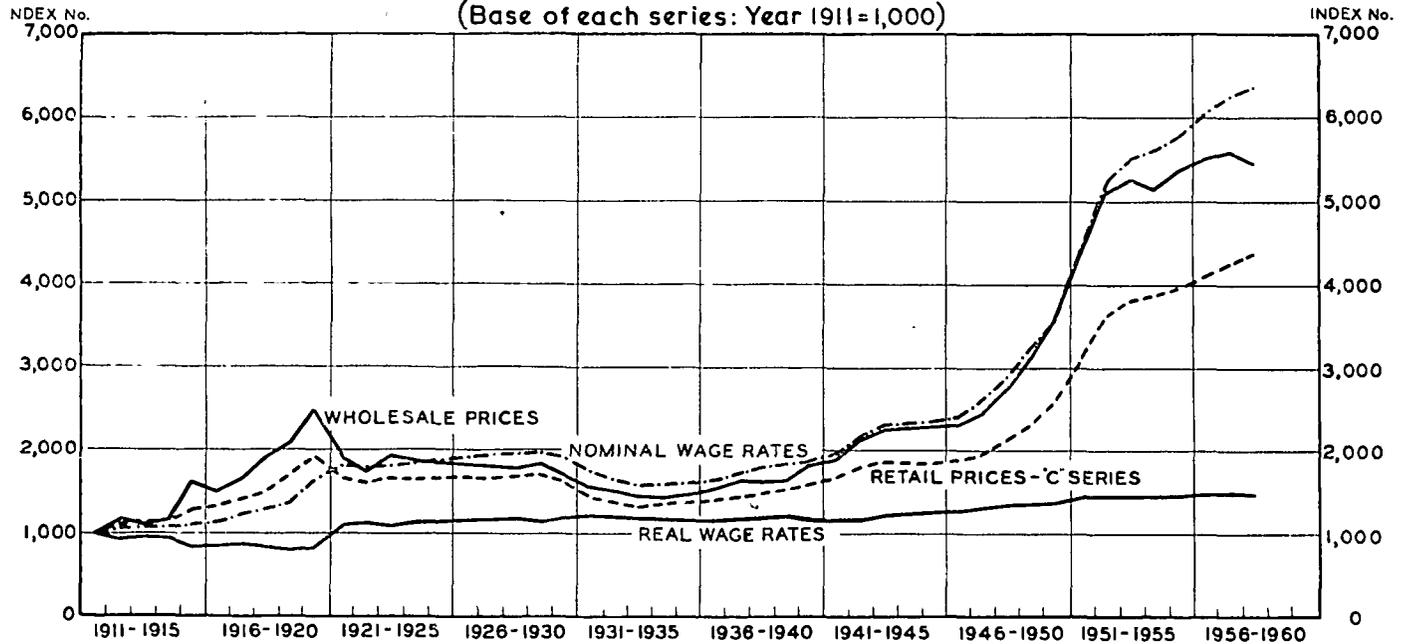
The index rose by approximately 32 per cent. during the 1914-18 War, and by a further 29 per cent. in the two post-war years (November, 1918 to November, 1920). From November, 1920 to November, 1922, there was a fall of 16 per cent. and the index remained relatively stable until the onset of the depression in 1929. During the four years of the depression 1929 to 1933 the index fell by 22 per cent., rising thereafter steadily until 1939 when it was nearly 14 per cent. above the level of 1933, and approximately at the level it had occupied at the date of the Armistice of 1918. Between the outbreak of war (September, 1939) and March, 1943 (pre-price stabilization) the index rose by approximately 23 per cent. to a level slightly below that reached at the height of the post-war boom in 1920. Compared with that for the March Quarter, 1943, the index number at the close of the war was practically unchanged.

Immediately after the outbreak of the war, price control was established by the Government under Regulations dated 28th September, 1939, and a national policy of price stabilization was applied as from 12th April, 1943, backed by more stringent price control and price subsidies. The retail price level, as measured by the index, remained relatively steady throughout 1944 and 1945 at the level of March, 1943. This stabilized level was approximately 23 per cent. above that of 1939 and 63 per cent. above the level prevailing at the beginning of the 1914-18 War. After the June Quarter, 1946, war-time controls, subsidies, etc., were progressively modified and by early 1949 had been virtually eliminated. In the latter part of 1950, export prices (especially for wool) rose very substantially. In December, 1950, the Commonwealth Court of Conciliation and Arbitration raised the basic wage by approximately 14 per cent. Concurrently, public works expenditure and private investment rose to very high levels.

This retail price index rose by 16 per cent. in the three years following the end of the 1939-45 War (i.e., to the September Quarter, 1948) and by 77 per cent. in the next five years

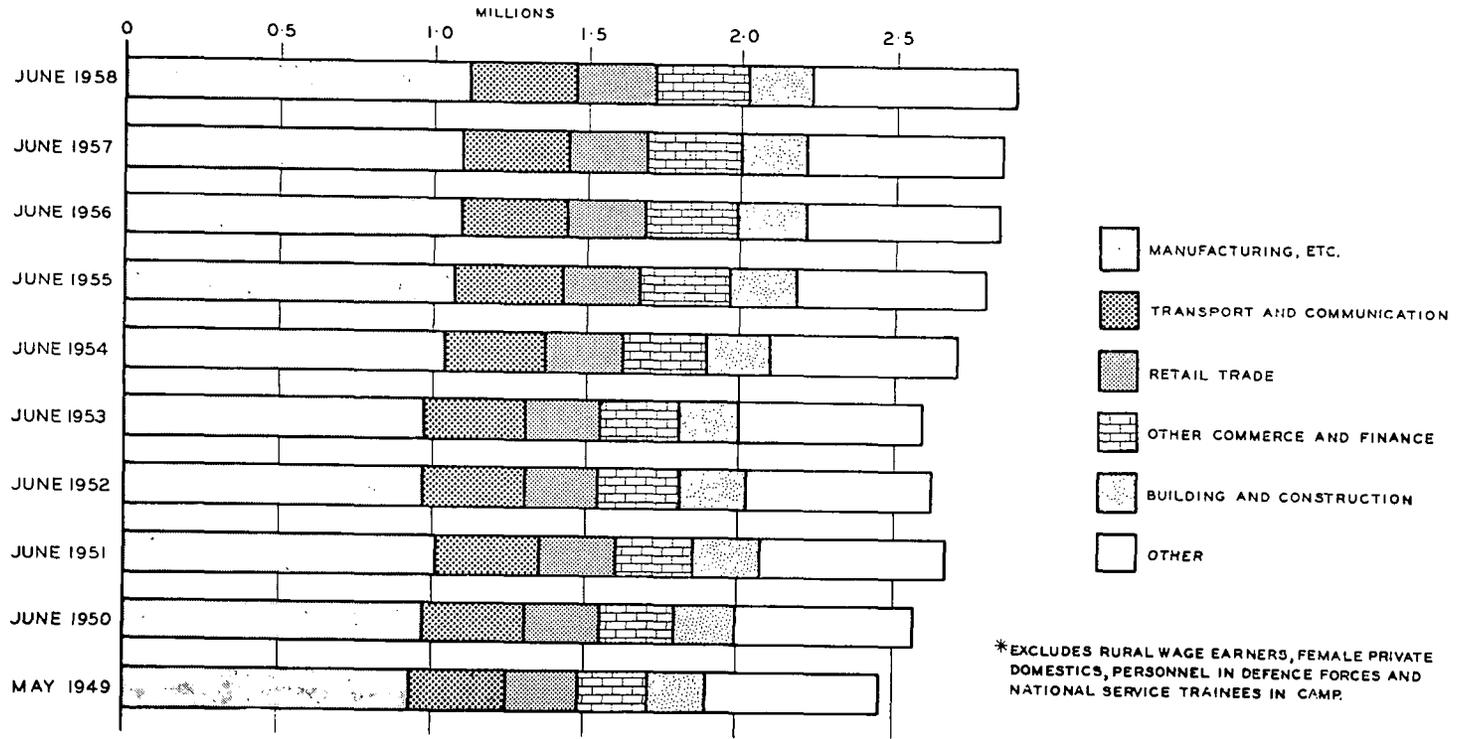
# WHOLESALE AND RETAIL PRICES; NOMINAL AND REAL WAGE RATES INDEX NUMBERS, AUSTRALIA, 1911 TO 1958

(Base of each series: Year 1911=1,000)



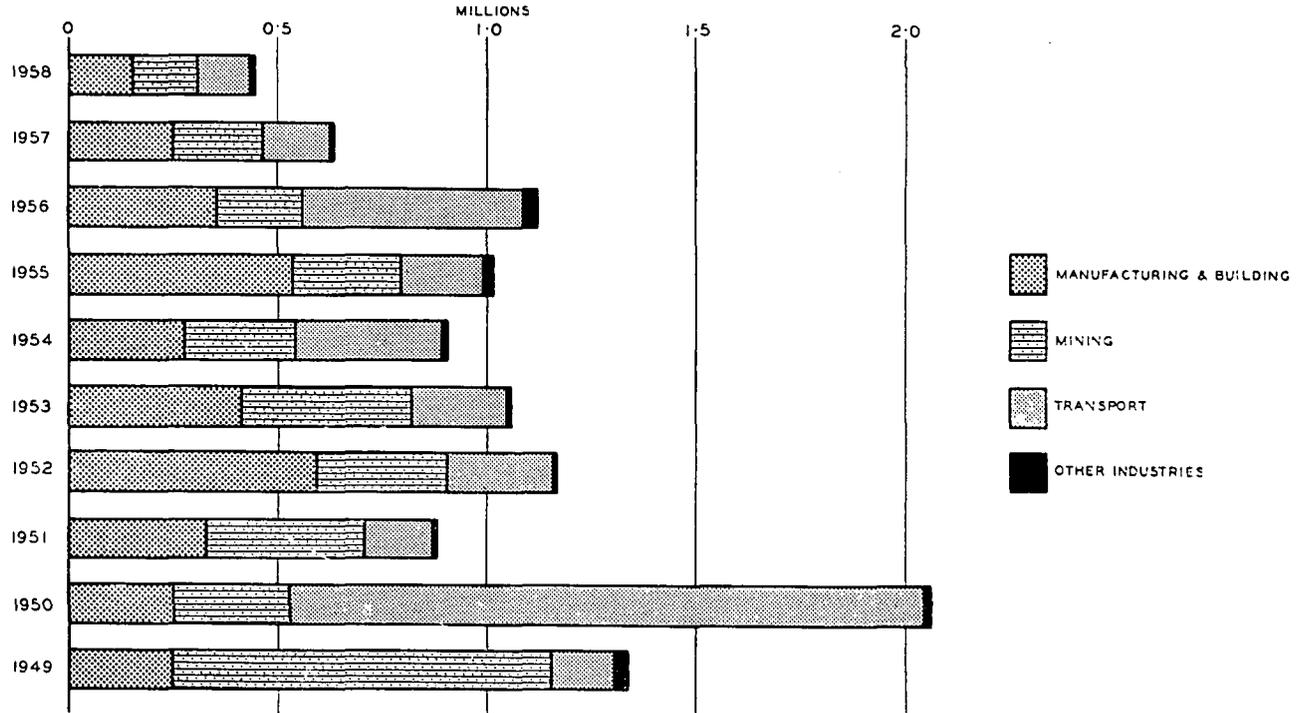
# WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT\*

## AUSTRALIA, 1949 TO 1958



# INDUSTRIAL DISPUTES, AUSTRALIA, 1949 TO 1958

## WORKING DAYS LOST - INDUSTRIAL GROUPS





to September Quarter, 1953, and remained relatively stable at that level until the December Quarter, 1954. Since then the index has risen each year and by the September Quarter, 1958, was approximately 13 per cent. higher than at the September Quarter, 1954. This level was approximately 187 per cent. above that of 1939.

3. "C" Series Retail Price Index, Six Capital Cities, 1914 to 1958.—The movement in the various groups of the index and in the index as a whole for each year for which it has been compiled is shown in the following table for the six capital cities combined:—

**"C" SERIES RETAIL PRICE INDEX AND ITS "GROUP" INDEX NUMBERS(a)**  
**FOR THE SIX CAPITAL CITIES COMBINED.**

(Base of Each Group: Weighted Average of Six Capital Cities, 1923-27 = 1,000.)

Period.	Food and Groceries. (b)	Rent (4 and 5 Roomed Houses). (c)	Clothing.	Miscellaneous.	Total "C" Series Index. (b)
1914 (d) .. .. .	641	649	754	749	687
1915 (d) .. .. .	842	659	792	786	782
1916 (d) .. .. .	812	665	881	802	795
1917 (d) .. .. .	836	685	992	882	847
1918 (d) .. .. .	861	722	1,097	972	905
1919 (d) .. .. .	1,026	768	1,238	1,036	1,022
1920 (d) .. .. .	1,209	851	1,365	1,194	1,166
1921 (d) .. .. .	950	877	1,246	1,010	1,013
1922 (d) .. .. .	945	929	1,052	999	975
1923 .. .. .	1,009	950	1,045	999	1,003
1924 .. .. .	969	988	1,003	1,004	987
1925 .. .. .	998	1,008	991	992	997
1926 .. .. .	1,023	1,026	986	998	1,011
1927 .. .. .	1,000	1,030	975	1,008	1,002
1928 .. .. .	985	1,066	997	1,010	1,009
1929 .. .. .	1,044	1,073	996	1,007	1,033
1930 .. .. .	941	1,047	951	999	975
1931 .. .. .	826	901	853	973	873
1932 .. .. .	796	817	804	958	830
1933 .. .. .	751	804	787	950	804
1934 .. .. .	783	810	785	944	817
1935 .. .. .	806	839	783	946	832
1936 .. .. .	825	879	792	947	850
1937 .. .. .	851	912	811	960	873
1938 .. .. .	886	942	829	961	897
1939 .. .. .	927	965	841	962	920
1940 .. .. .	939	973	956	998	957
1941 .. .. .	947	976	1,118	1,060	1,008
1942 .. .. .	1,031	976	1,308	1,112	1,091
1943 .. .. .	1,037	975	1,440	1,160	1,131
1944 .. .. .	1,026	976	1,435	1,165	1,126
1945 .. .. .	1,034	975	1,425	1,161	1,126
1946 .. .. .	1,036	976	1,505	1,167	1,145
1947 .. .. .	1,100	977	1,566	1,199	1,188
1948 .. .. .	1,256	979	1,744	1,257	1,295
1949 .. .. .	1,394	982	1,997	1,338	1,415
1950 .. .. .	1,566	987	2,286	1,435	1,560
1951 .. .. .	2,041	1,009	2,749	1,679	1,883
1952 .. .. .	2,526	1,057	3,096	1,958	2,196
1953 .. .. .	2,641	1,138	3,223	2,053	2,302
1954 .. .. .	2,671	1,192	3,218	2,062	2,326
1955 .. .. .	2,811	1,226	3,237	2,081	2,393
1956 .. .. .	A 2,923 B 3,084	1,325	3,261	2,236	A 2,489 B 2,547
1957 .. .. .	2,973 2,971	1,380	3,357	2,372	2,567 2,565
1958 .. .. .	3,021 2,993	1,460	3,418	2,424	2,626 2,615
1958—March Quarter ..	3,012 2,988	1,412	3,393	2,399	2,601 2,592
June .. .. .	3,018 2,982	1,455	3,424	2,400	2,620 2,607
September .. .. .	3,017 2,981	1,476	3,426	2,423	2,630 2,616
December .. .. .	3,037 3,022	1,495	3,429	2,475	2,652 2,646

(a) "Group" index numbers in the above table cannot be compared with each other in order to show the relative cost of Food and Groceries, Rent, Clothing or Miscellaneous requirements, since each "Group" has its own base = 1,000, namely, the weighted average cost for the six capital cities as a whole during the five-year period 1923-27. (b) The index in column "A" excludes and that in column "B" includes the price movement of potatoes and onions. See para. 5 on page 399. (c) See note (c) to table at top of page 401. (d) November.

A graph showing "C" Series retail price index numbers appears on page 403.

## § 6. International Comparisons.

The following table shows the movement of retail prices in recent years in Australia and certain other countries.

**RETAIL PRICE INDEX NUMBERS.**  
(FOOD, RENT, CLOTHING, MISCELLANEOUS HOUSEHOLD EXPENDITURE.)  
(Base: September Quarter, 1939 = 100.)

Period.	Australia. (a)	United Kingdom.	Canada.	New Zealand.	Union of South Africa.	United States of America.
1939—						
September Quarter ..	100	100	100	100	100	100
1940—Year .. .. .	105	119	105	104	104	100
1941— " .. .. .	110	128	111	108	109	105
1942— " .. .. .	119	129	116	111	118	116
1943— " .. .. .	124	128	117	114	126	123
1944— " .. .. .	123	129	118	116	130	125
1945— " .. .. .	123	131	119	118	133	127
1946— " .. .. .	125	131	123	119	135	138
		Base: 17.6.57 = 100.(b)				
1947— " .. .. .	130	102	134	122	141	158
1948— " .. .. .	141	108	154	132	149	170
1949— " .. .. .	155	111	(c) 160	(d) 134	154	168
1950— " .. .. .	170	114	165	142	160	171
1951— " .. .. .	206	124	183	157	172	185
1952— " .. .. .	240	(c) 136	186	170	187	189
1953— " .. .. .	251	140	184	177	194	190
1954— " .. .. .	254	143	185	186	197	191
1955— " .. .. .	261	149	185	(c) 190	204	191
	A	B				
1956— " .. .. .	272	278	(c) 157	188	197	207
1957— " .. .. .	280	280	162	194	201	213
1958— " .. .. .	287	286	167	199	210	(e) 205
1958—March Quarter ..	284	283	166	197	203	218
June .. .. .	286	285	168	199	205	220
Sept. .. .. .	287	286	166	199	215	221
Dec. .. .. .	290	289	168	201	216	(e) 206

(a) The index in column "A" excludes, and that in column "B" includes, the price movement of potatoes and onions. See para. 5 on page 399. (b) New series cannot be linked to former series. (c) New series linked to former series. (d) Consumers' Retail Price Index from March Quarter, 1949 onwards. Index numbers for earlier periods (shown for purposes of comparison) are obtained by linking the movement in the Retail Price Index (base 1926-30) to the new index. (e) Not available.

## B. WHOLESALE PRICES AND PRICE INDEXES.

## § 1. General.

Two indexes of wholesale prices have been compiled by the Commonwealth Bureau of Census and Statistics. These are:—

- (i) The Melbourne Wholesale Price Index;
- (ii) The Wholesale Price (Basic Materials and Foodstuffs) Index.

Particulars of the Melbourne Wholesale Price Index, which is now obsolescent, are given in § 3 commencing on page 410.

After reviewing the list of items and weighting of this index, the 1930 Conference of Statisticians resolved that a new index of wholesale prices of basic materials and foodstuffs should be compiled. This index—the Wholesale Price (Basic Materials and Foodstuffs) Index—which extends back to the year 1928 and is compiled monthly, is a special purpose index and one of a series of wholesale price indexes designed for special purposes.

## § 2. Wholesale Price (Basic Materials and Foodstuffs) Index.

1. **Price Quotations.**—The prices used in the index have in the main been obtained directly from manufacturers and merchants, and, with a few important exceptions, from Melbourne sources. Apart from locally-produced building materials and one or two minor commodities, however, the price movements may be taken as representative of variations in wholesale prices of basic materials in most Australian markets.

Commodities in the index are priced in their primary or basic form wherever possible and, in respect of imported materials, as nearly as may be at the point where they first make effective impact on the local price structure. Thus the prices of imported goods are not taken at the time of import, but rather on an ex-bond (or into factory) basis.

Broadly, where home-consumption prices exist for local products, they have been used in this index. During the year 1950-51, wool for local manufacture was subsidized, and the home-consumption price for wool was used to calculate the index numbers shown in the table on page 410.

2. **Commodities and Grouping.**—For purposes of this index "basic" materials (as opposed to certain of the foodstuffs) are commodities in the primary or basic forms in which they first enter into productive processes carried out in Australia. The list of items is divided into seven main groups, each of which is sub-divided into goods which are mainly imported, and goods which are mainly home-produced. The percentage of the total aggregate in 1958 contributed by each group was as follows:—Metals and coal, 18.03; oils, fats and waxes, 9.14; textiles, 2.95; chemicals, 4.08; rubber and hides, 1.57; building materials, 11.09; foodstuffs and tobacco, 53.14. Goods principally imported comprised 25.61 per cent. of the total aggregate in 1958, and goods principally home-produced, 74.39 per cent.

A full list of the commodities and the quantity-multipliers (weights) is published in *Labour Report* No. 45, 1957, page 26.

3. **Method of Construction.**—The index is constructed on the simple aggregative fixed-weights formula. The weights (quantity-multipliers) are based on estimates of the average annual consumption of the commodities in Australia during the period 1928-29 to 1934-35 inclusive. Changes in usage, changes of category as between "imported" and "home-produced" for some commodities, and changes in the industrial structure have affected the validity of some of the weights in the index.

During 1956, supplies and prices of potatoes and onions fluctuated violently upwards and downwards between abnormally wide limits. These fluctuations were so great as to dominate the movement of the sections of the index in which these items were included, namely, "Foodstuffs and Tobacco", "Goods Principally Home-produced" and "Total All Groups". In the circumstances of the case, neither seasonal adjustment nor conversion of the index to a "changing weights" formula could be applied to eliminate these transient fluctuations. Accordingly, in order to provide a representative measure of general trend in wholesale prices, the index was reconstructed as from July, 1936 by omitting potatoes and onions.

Consideration is being given to the enlargement of the index to cover additional groups and to revision of the weighting pattern of the index.

4. **Index Numbers.**—Index numbers for each group of commodities and for all groups combined for the index of wholesale prices of basic materials and foodstuffs are given in the following table. Current index numbers, on the base: Average of three years ended June, 1939 = 100, are published monthly in the mimeographed statistical bulletin *Wholesale Price (Basic Materials and Foodstuffs) Index* and in the *Monthly Review of Business Statistics*. A table showing index numbers computed to the base 1928 = 100 is published in the *Labour Report*. A graph showing wholesale price index numbers for the period 1911 to 1958 appears on page 403.

WHOLESALE PRICE (BASIC MATERIALS AND FOODSTUFFS) INDEX NUMBERS.  
(Base of each Group : Average of 3 years ended June, 1939 = 100.)

Period.	Basic Materials.							Food-stuffs and Tobacco. (a)	Basic Materials and Foodstuffs.		
	Metals and Coal.	Oils, Fats and Waxes.	Textiles.	Chemicals.	Rubber and Hides.	Building Materials.	Total.		Goods principally Imported. (b)	Goods principally Home-produced. (a)	Total All Groups. (a)
1928-29	127	106	129	121	115	95	114	107	91	118	110
1929-30	126	111	99	116	87	94	107	110	94	118	111
1930-31	116	117	80	117	73	96	105	91	100	99	99
1931-32	108	113	77	119	74	95	101	86	100	92	95
1932-33	104	109	75	119	69	95	98	80	97	87	90
1933-34	103	84	102	111	80	94	92	84	89	89	90
1934-35	97	90	78	102	77	93	89	87	92	89	90
1935-36	92	95	100	99	88	93	90	92	95	92	93
1936-37	96	99	118	99	111	99	99	98	99	98	99
1937-38	101	101	100	100	97	104	102	102	102	101	101
1938-39	103	100	82	101	92	97	99	101	99	100	100
1939-40	105	115	104	107	116	108	109	99	111	101	104
1940-41	107	137	111	124	126	128	122	107	133	106	114
1941-42	117	151	118	137	135	135	133	116	153	112	124
1942-43	129	167	147	142	138	163	149	126	176	120	136
1943-44	131	170	150	143	140	174	153	130	182	122	140
1944-45	131	168	152	143	140	175	152	132	182	124	141
1945-46	130	156	152	142	140	177	149	136	178	127	142
1946-47	132	145	191	140	131	180	149	139	177	130	144
1947-48	146	161	283	148	126	190	166	154	192	145	159
1948-49	185	173	342	159	130	198	188	174	201	172	180
1949-50	214	184	434	187	143	225	214	196	223	196	204
1950-51	256	196	641	242	292	268	264	229	256	240	244
1951-52	343	220	577	314	298	370	321	276	288	300	297
1952-53	392	234	607	350	224	404	350	293	292	331	319
1953-54	388	222	566	323	191	363	332	308	271	339	319
1954-55	391	214	510	314	246	372	330	315	277	340	322
1955-56	404	220	456	317	328	415	345	325	292	352	334
1956-57	409	241	520	344	302	463	367	324	311	357	344
1957-58	398	238	437	349	280	453	355	325	301	355	339
1958—											
Jan. ..	400	236	424	347	278	458	355	318	302	349	335
Feb. ..	397	236	434	347	273	458	355	320	301	350	336
Mar. ..	398	236	404	347	278	458	353	323	301	351	337
Apr. ..	395	236	389	346	277	458	351	321	301	349	335
May ..	393	236	384	346	263	420	343	330	290	355	336
June ..	394	236	387	346	254	420	343	332	290	357	337
July ..	394	231	387	327	249	420	339	332	285	357	336
Aug. ..	394	231	358	327	224	420	338	338	285	360	338
Sept. ..	394	231	358	327	244	432	340	337	283	361	338
Oct. ..	394	231	341	327	243	432	339	330	282	356	334
Nov. ..	394	232	344	327	254	425	338	326	282	352	332
Dec. ..	390	231	337	327	267	420	336	322	282	348	328

(a) During 1956 these indexes were reconstructed from July, 1936 by excluding potatoes and onions. See para. 3 on p. 409. (b) Represents only such imported commodities as are included in the Wholesale Price Index and does not measure changes in the prices of all imports.

NOTE.—The figures given in this table are comparable in the vertical columns, but are not directly comparable horizontally.

### § 3. Melbourne Wholesale Price Index.

1. General.—An index of Melbourne wholesale prices was first computed in 1912. It relates chiefly to basic materials and foods weighted in accordance with consumption in the years immediately preceding that date. Neither the components of the list of items nor the weighting have been varied, except as indicated in footnote (a) to the following table. Consequently, the index is outmoded for current use but it has some historical significance as a measure of changes in the prices of its component items combined in the proportions in which they were in common use about the year 1910. It is now published on an annual basis for "All Groups" only and is used mainly as an approximate indication of long-term trends since the year 1861, for which it was first compiled. A description of the index and a list of the commodities included in it were published in *Labour Report* No. 38, 1949, pages 43-45.

2. Index Numbers.—Index numbers for each group of commodities as well as for all groups combined are shown in the following table :—

MELBOURNE WHOLESALE PRICE INDEX NUMBERS.  
(Base of each Group : Year 1911 = 1,000.)

Year.	Metals and Coal.	Wool, Cotton, Leather, etc.	Agri-cultural Produce, etc.	Dairy Produce.	Gro-ceries.	Meat.	Building Ma-terials.	Chem-i-cals.	All Groups.
1861 .. ..	1,438	1,381	1,583	1,008	1,963	..	1,070	2,030	1,538
1871 .. ..	1,096	1,257	1,236	864	1,586	..	1,044	1,409	1,229
1881 .. ..	1,178	1,115	1,012	935	1,421	..	1,091	1,587	1,121
1891 .. ..	895	847	1,024	995	1,032	888	780	1,194	945
1901 .. ..	1,061	774	928	1,029	1,048	1,345	841	917	974
1911 .. ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1921 .. ..	2,173	1,361	1,767	2,000	1,977	2,158	2,733	2,303	1,903
1931 .. ..	1,826	1,040	1,121	1,398	1,794	1,512	2,025	2,166	1,429
1941 .. ..	1,960	1,402	1,721	1,554	1,883	1,776	3,138	2,527	1,796
1949 .. ..	3,502	3,966	2,876	2,309	2,558	3,356	4,611	3,221	3,191
1950 .. ..	3,902	5,464	3,155	2,459	2,829	4,616	(a)5,567	3,263	3,816
1951 .. ..	5,080	7,943	4,512	2,930	2,850	6,438	(a)7,074	3,294	5,098
1952 .. ..	6,481	7,365	5,038	4,024	3,455	6,289	(a)9,338	3,723	5,647
1953 .. ..	6,615	6,950	4,958	4,533	3,767	6,303	(a)8,519	4,691	(b)5,631

(a) The list of items and weighting of the original Building Materials group of this index are outmoded in respect of recent years. The movement shown here for this group between 1949 and 1953 has been calculated in accordance with the movement occurring in the Building Materials group of the Basic Materials and Foodstuffs Index. (b) The "All Groups" index numbers for the years 1954, 1955, 1956, 1957 and 1958 were 5,384, 5,548, 5,916, 5,814 and 5,575 respectively.

NOTE.—The figures given in this table are comparable in the vertical columns but are not directly comparable horizontally.

C. CONTROL OF PRICES DURING AND SINCE THE 1939-45 WAR.

1. General.—An account of the measures taken by the Commonwealth Government to control prices from September, 1939 (immediately after the outbreak of war), until 29th May, 1948 (the date of the Prices Referendum), was given in Official Year Book No. 37, pages 458-464.

2. Transfer of Price Control to the States.—Consequent upon the rejection of the proposal embodied in the Prices Referendum held on 29th May, 1948, that permanent power to control rents and prices (including charges) be conferred on the Commonwealth Government, responsibility for price fixation was assumed by the State Governments and steps were taken to pass State Prices Acts. These acts were proclaimed to operate simultaneously on 20th September, 1948. Except in the case of Queensland, each Act was to remain in force for a specific period, but the period varied from State to State.

On 20th September, 1948, each State Government issued declarations covering uniform lists of goods and services, which were brought under price control. Existing Commonwealth Prices Regulation Orders continued to apply to these goods and services until specially varied in accordance with the terms of the State legislation. At the same time, the Commonwealth Government issued an identical list of declared items to operate in the Australian Capital Territory and other Territories of the Commonwealth.

In the operation of State price control, the State Prices Commissioners collaborated closely. Conferences of Commissioners were held at intervals of approximately two months. Thus a large degree of uniformity was attained in controlling and decontrolling items and in the fixation of margins and prices of major items.

Since 1952, price control has been progressively modified in all States. General price control ceased in Western Australia on 31st December, 1953; in Tasmania on 31st October, 1954; in Victoria on 31st December, 1954; and in the Australian Capital Territory on 10th February, 1955. In New South Wales, general control of prices was suspended on 15th April, 1955, but was temporarily restored on some items from July, 1955 to September, 1956.

3. Price Stabilization.—Expenditure by the Commonwealth Government on price stabilization subsidies reached a peak in 1947-48 and since then the Commonwealth Government has progressively reduced the range of commodities eligible for subsidy.

In addition to those subsidies which had been an integral part of the Price Stabilization Plan, the Commonwealth Government paid bounties and subsidies for assistance to primary production, and these payments also had a stabilizing influence on prices.

For particulars of expenditure by the Commonwealth Government on price stabilization and other subsidies and bounties, see Chapter XXI.—Public Finance.

## D. WAGES.

## § 1. Arbitration and Wages Boards Acts and Associated Legislation.

1. **General.**—Particulars regarding the operation of Commonwealth and State Laws for the regulation of wages, hours and conditions of labour were first compiled for the year 1913, and revised particulars have appeared annually in the *Labour Report* and in issues of the Official Year Book prior to No. 38.

2. **Commonwealth.**—Under placitum (xxxv) of section 51 of the Commonwealth of Australia Constitution, the Commonwealth Parliament is empowered to make laws with respect to "conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State". The Parliament has made such a law, namely, the Conciliation and Arbitration Act.

This Act defines an "industrial dispute" as "(a) A dispute (including a threatened, impending or probable dispute) as to industrial matters which extends beyond the limits of any one State; and (b) a situation which is likely to give rise to a dispute as to industrial matters which so extends; and includes—(c) such a dispute in relation to employment in an industry carried on by, or under the control of, a State or an authority of a State; (d) a dispute in relation to employment in an industry carried on by, or under the control of, the Commonwealth or an authority of the Commonwealth, whether or not the dispute extends beyond the limits of any one State; and (e) a claim which an organization is entitled to submit to the Commission under section eleven A of the *Public Service Arbitration Act 1920-1957* or an application or matter which the Public Service Arbitrator has refrained from hearing, or from further hearing, or from determining under section fourteen A of that Act, whether or not there exists in relation to the claim, application or matter a dispute as to industrial matters which extends beyond the limits of any one State."

The Conciliation and Arbitration Act was extensively amended by an Act (No. 44 of 1956) assented to on 30th June, 1956. This amendment altered the structure of the arbitration machinery by separating the judicial functions from the conciliation and arbitration functions. The Commonwealth Industrial Court was established to deal with judicial matters under the Act and the Commonwealth Conciliation and Arbitration Commission to handle the functions of conciliation and arbitration. Further amendments were made by Act No. 103 of 1956 and Act No. 30 of 1958 (assented to on 21st May, 1958). A summary of the provisions of the Conciliation and Arbitration Act 1904-1958 is given in the following paragraphs.

The Commonwealth Industrial Court is composed of a Chief Judge and not more than two other Judges. The Commonwealth Conciliation and Arbitration Commission comprises a President, not less than two Deputy Presidents, a Senior Commissioner, not less than five Commissioners and a number of Conciliators. Judges of the Commonwealth Court of Conciliation and Arbitration were made either members of the Commonwealth Industrial Court or presidential members of the Commonwealth Conciliation and Arbitration Commission. Conciliation Commissioners became non-presidential members of the Commission.

The jurisdiction of the Commonwealth Industrial Court shall be exercised by not less than two Judges except in the following circumstances. A single Judge may exercise the jurisdiction of the Court with respect to the dismissal or injury of an employee on account of industrial action, interpretation of awards, questions concerning eligibility of membership of an organization, disputes between an organization and its members and a prescribed matter of practice or procedure. A single Judge may refer a question of law for the opinion of the Court constituted by not less than two Judges. The Court is a Superior Court of Record with the same power to punish contempts of its power and authority as is possessed by the High Court. In general, decisions of the Industrial Court are final; however, an appeal lies to the High Court but only when the latter grants leave to appeal. The Act provides for the registration of associations of employees and employers and for inquiries to be held concerning disputed elections in organizations and certain powers in connexion therewith are, by the Act, given to the Industrial Court. Provision is also made for the Commission to exercise the powers of the Court with regard to an application for cancellation of registration of an organization. Any such change of jurisdiction must be notified by proclamation. This provision could be used if the powers of the Court in this regard were declared, in whole or in part, to be invalid.

Special provision was also made concerning the right of audience before the Commonwealth Industrial Court. Briefly, except in proceedings which, in general, involve questions of law or offences against the Act, parties are able to elect whether to appear personally or to be represented by lawyers or officials. Even in proceedings involving questions of law, except appeals from decisions by other Courts to the Industrial Court, on matters arising under this Act or the Public Service Arbitration Act 1920-1957, the parties may, if they wish and the Court grants leave, be represented by officials.

The Commonwealth Conciliation and Arbitration Commission is empowered to prevent or settle industrial disputes by conciliation or arbitration, and to make suggestions and to do such things as appear right and proper for (a) effecting a reconciliation between parties to industrial disputes; (b) preventing and settling industrial disputes by amicable agreement; and (c) preventing and settling, by conciliation or arbitration, industrial disputes not prevented or settled by amicable agreement. The Commission may exercise its powers of its own motion or on the application of a party.

The President may assign a Commissioner to deal with industrial disputes relating to particular industries, or members of the Commission to deal with a particular industrial dispute. However, subject to the approval of the President, it is the duty of the Senior Commissioner to organize and allocate the work of the Commissioners and Conciliators.

When an industrial dispute occurs or is likely to occur, a Commissioner shall take steps for the prompt prevention or settlement of that dispute by conciliation or, if in his opinion conciliation is unlikely to succeed or has failed, by arbitration. A Commissioner may arrange with the Senior Commissioner for a Conciliator to assist the parties to reach an amicable agreement and shall do so if the parties so request. If an agreement is reached, a memorandum of its terms shall be made in writing, and may be certified by the Commission. A certified memorandum shall have the same effect as an award.

The Commission in Presidential Session, that is, the Commission constituted by at least three presidential members nominated by the President and not otherwise, is empowered to deal with making awards, or certifying agreements, in so far as they concern standard hours, basic wages and long-service leave.

Upon application by a party to an industrial dispute, a Commissioner shall consult with the President as to whether in the public interest the dispute should be dealt with by a Commission constituted by not less than three members nominated by the President, at least one of whom shall be a presidential member and one, where practicable, the Commissioner concerned. The President may direct the Commission to hear the dispute; however, after consideration the Commission may refer the dispute back for determination to the Commissioner originally dealing with the dispute.

An appeal against the decision of a Commissioner shall be heard by not less than three members nominated by the President, of whom at least two are presidential members of the Commission. However, an appeal will not be heard unless the Commission considers it is necessary as a matter of public interest.

Provision is also made in the Act for a presidential member of the Commission to handle industrial matters in connexion with the Maritime Industries, Snowy Mountains Area and Stevedoring Industry, except in those matters for which the Act requires that the Commission shall be constituted by more than one member.

Before the 1956 amendment of the Act, industrial disputes were dealt with, in part by an Arbitration Court constituted under the Act and otherwise by Conciliation Commissioners appointed under the Act. However, the division of work between the Court and Conciliation Commissioners has varied with successive amendments to the Act. Prior to 1947, disputes were dealt with by either one or other part of the tribunal, except that questions about basic wages and standard hours could be dealt with only by the Court constituted by at least three Judges. Decisions of Conciliation Commissioners were subject to appeal to the Court. An amending Act of 1947 gave Conciliation Commissioners the same power as the Court, except in the matter of standard hours, basic wages and annual leave, and made decisions of Conciliation Commissioners final. However, a further amending Act in 1952 provided a right of appeal to the Arbitration Court against decisions of Conciliation Commissioners.

The Commonwealth Conciliation and Arbitration Commission also deals with disputes and industrial matters, interstate or intra-state, associated with undertakings or projects of the Commonwealth Government which have been declared by the Minister to be Commonwealth projects for the purposes of this Act. In effect, this places employees of Commonwealth projects, so declared, under the jurisdiction of the Commission. The Minister has the power to exempt certain persons or classes of persons working on these projects from the jurisdiction of the Commission.

The Commission may make an award in relation to an industrial dispute concerning employees of a Commonwealth project or when the Public Service Arbitrator refrains from dealing with claims made by a Public Service employee organization or consents to the claims being presented to the Commission, though such an award may be inconsistent with a law of the Commonwealth relating to salaries, wages, rates of pay or terms or conditions of service of employees in the Public Service as defined by section 3 of the Public Service Arbitration Act 1920-1957, not being the Commonwealth Employees' Compensation Act 1930-1956, the Commonwealth Employees' Furlough Act 1943-1953, the Superannuation Act 1922-1957 or any other prescribed Act.

The Act provides that where a State law, or an order, award, decision or determination of a State industrial authority is inconsistent with or deals with a matter dealt with in an award of the Commission, the latter shall prevail, and the former, to the extent of the inconsistency or in relation to the matter dealt with, shall be invalid.

3. States.—In each State, Industrial Tribunals have been established to regulate and arbitrate in industrial matters. The chief of these are the Industrial Commission of New South Wales, the Industrial Courts of Queensland and South Australia, and the Western Australian Court of Arbitration, together with Wages Boards for specific industries or occupations which operate in Victoria, South Australia and Tasmania. Further details concerning the functions and powers of these authorities may be found in *Labour Report* No. 45.

## § 2. Rates of Wage and Hours of Labour.

1. General.—The collection of information respecting the current rates of wage payable in different callings and in occupations in various industries was first undertaken by this Bureau in the early part of 1913. The particulars are obtained primarily from awards, determinations and agreements under Commonwealth and State Industrial Acts and are therefore the minimum rates prescribed. They refer generally to the capital city in each State, but in industries which are not carried on in the capital cities, e.g., mining, agriculture, etc., the rates in the more important centres are taken. In those cases where no award, determination or agreement is in force, particulars are taken of the ruling union or predominant rate. During recent years, the number of predominant rates of wage included in the tabulations has been reduced considerably, as most of the industries and occupations are now covered by awards, determinations or industrial agreements. The statistics of nominal wages and hours of labour are in course of revision to meet changes in industrial structure. The amounts should not be regarded as actual current averages, but as an index of changes expressed in money and hour terms.

The index numbers for male adult workers are computed with the weighted average wage in 1911 as base (= 1,000). In the case of females, however, it has not been possible to secure information for the years prior to 1914, and the index numbers are therefore computed with the weighted average rate of wage payable to adult female workers in Australia at 30th April, 1914 as base (= 1,000).

An extensive tabular presentation of the minimum rates of wage for adult male and female workers in the main occupations in the capital city of each State is given in the Appendix to the *Labour Report*.

2. Weekly Wage Rates.—(i) *General*. The average rate of wage for each industrial group is computed by taking the arithmetic average of the rates of wage payable for all classified occupations within that group. These averages are weighted to give the averages for the States and for Australia.

(ii) *Adult Males—States.* The following table gives the weighted average nominal weekly rates of wage payable to adult male workers at the dates specified :—

**WEEKLY WAGE RATES : ADULT MALES.**

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
No. of Occupations included.(b) ..	870	894	615	562	477	466	3,884

**RATES OF WAGE.**

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1939.. ..	96 7	93 6	97 5	88 11	100 6	89 5	95 3
" " 1954.. ..	298 4	284 3	278 7	282 2	293 3	299 2	290 0
" " 1955.. ..	310 1	296 7	284 11	284 9	304 9	302 7	300 0
" " 1956(c) .. ..	331 8	312 10	301 3	297 11	318 1	319 9	317 9
" " 1957.. ..	333 6	318 10	304 0	309 2	326 6	326 11	322 6
" " 1958.. ..	337 8	322 0	318 3	315 0	328 8	331 9	327 10

**INDEX NUMBERS.**

(Base : Weighted Average Wage for Australia (51s. 3d.), 1911 = 1,000.)

31st December, 1939.. ..	1,885	1,825	1,900	1,735	1,962	1,745	1,858
" " 1954.. ..	5,820	5,547	5,435	5,506	5,722	5,837	5,658
" " 1955.. ..	6,051	5,787	5,559	5,555	5,946	5,905	5,853
" " 1956(c) .. ..	6,471	6,104	5,878	5,812	6,206	6,239	6,201
" " 1957.. ..	6,508	6,221	5,931	6,032	6,370	6,378	6,292
" " 1958.. ..	6,588	6,282	6,210	6,147	6,413	6,473	6,396

(a) The statistics of nominal wages and hours of labour are in course of revision to meet changes in industrial structure. The amounts shown should not be regarded as actual current averages but as an index of changes expressed in money and hour terms. (b) As at 31st December, 1958. (c) Partly estimated.

(iii) *Adult Males—Industrial Groups.* The following table shows for Australia the average weekly rates of wage and index numbers in each industrial group and for all groups at the dates specified.

**WEEKLY WAGE RATES : ADULT MALES, INDUSTRIAL GROUPS, AUSTRALIA.**

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES IN EACH INDUSTRIAL GROUP.(a)

Industrial Group.	31st Dec., 1939.	31st Dec., 1954.	31st Dec., 1955.	31st Dec., 1956.	31st Dec., 1957.	31st Dec., 1958.
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**RATES OF WAGE.**

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
I. Wood, Furniture, etc. .. ..	100 1	281 11	295 11	309 4	315 0	321 3
II. Engineering, etc. .. ..	99 3	284 1	288 8	303 5	309 6	314 8
III. Food, Drink, etc. .. ..	96 9	280 9	290 4	307 3	312 3	318 5
IV. Clothing, Textiles, etc. ..	93 2	278 10	283 4	294 2	308 11	313 10
V. Books, Printing, etc. .. ..	114 3	324 11	332 2	348 9	353 4	359 6
VI. Other Manufacturing .. ..	95 8	279 7	288 9	304 1	310 6	315 3
VII. Building .. ..	106 5	307 6	323 1	340 0	346 10	352 3
VIII. Mining, etc. .. ..	109 1	288 0	300 4	315 8	321 3	325 10
IX. Railways, etc. .. ..	97 1	289 9	301 11	322 1	323 2	327 3
X. Other Transport .. ..	92 10	273 3	281 3	298 3	302 4	307 7
XI. Shipping, etc.(b) .. ..	98 6	308 9	310 0	324 9	334 8	339 10
XII. Agricultural, etc.(b) .. ..	84 0	319 7	326 8	c 351 0	354 8	360 2
XIII. Domestic, etc.(b) .. ..	89 11	263 0	273 6	287 7	292 9	297 8
XIV. Miscellaneous .. ..	92 10	270 5	282 10	300 1	302 9	308 5
All Industrial Groups .. ..	95 3	290 0	300 0	c 317 9	322 6	327 10

For footnotes see next page.

WEEKLY WAGE RATES : ADULT MALES, INDUSTRIAL GROUPS, AUSTRALIA  
—continued.

Industrial Group.	31st Dec., 1939.	31st Dec., 1954.	31st Dec., 1955.	31st Dec., 1956.	31st Dec., 1957.	31st Dec., 1958.
INDEX NUMBERS.						
(Base : Weighted Average Wage for All Groups in 1911 (51s. 3d.) = 1,000.)						
I. Wood, Furniture, etc. .. ..	1,953	5,501	5,774	6,036	6,146	6,269
II. Engineering, etc. .. ..	1,936	5,542	5,632	5,921	6,039	6,139
III. Food, Drink, etc. .. ..	1,888	5,478	5,665	5,995	6,093	6,213
IV. Clothing, Textiles, etc. ..	1,817	5,441	5,529	5,740	6,028	6,124
V. Books, Printing, etc. .. ..	2,229	6,340	6,481	6,805	6,893	7,015
VI. Other Manufacturing .. ..	1,867	5,455	5,635	5,933	6,059	6,152
VII. Building .. ..	2,076	6,000	6,305	6,634	6,768	6,873
VIII. Mining, etc. .. ..	2,142	5,620	5,861	6,159	6,269	6,358
IX. Railways, etc. .. ..	1,895	5,654	5,891	6,284	6,305	6,386
X. Other Transport .. ..	1,812	5,332	5,488	5,820	5,899	6,002
XI. Shipping, etc.(b) .. ..	1,922	6,025	6,049	6,337	6,529	6,630
XII. Agricultural, etc.(b) .. ..	1,639	6,236	6,374	(c)6,849	6,920	7,027
XIII. Domestic, etc.(b) .. ..	1,755	5,132	5,337	5,611	5,713	5,808
XIV. Miscellaneous .. ..	1,811	5,276	5,519	5,855	5,908	6,017
All Industrial Groups .. ..	1,858	5,658	5,853	(c)6,201	6,292	6,396

(a) See note (a) to table at top of page 415. (b) Includes the value of keep, where supplied.  
(c) Partly estimated.

(iv) *Adult Females—States.* The following table shows, for each State and Australia, the weighted average nominal weekly rates of wage payable to adult female workers for a full week's work at the dates specified.

## WEEKLY WAGE RATES : ADULT FEMALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK  
(EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
No. of Occupations included(b) ..	84	87	38	47	40	39	335

## RATES OF WAGE.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1939 ..	53 3	51 9	55 2	49 7	55 8	50 8	52 8
" " 1954 ..	198 9	200 2	190 0	199 5	190 5	196 7	197 11
" " 1955 ..	205 3	206 9	192 10	199 11	193 7	197 11	203 4
" " 1956 ..	216 10	216 2	201 3	207 5	201 8	207 10	213 2
" " 1957 ..	220 1	222 2	207 11	217 11	210 11	215 4	218 10
" " 1958 ..	223 3	225 0	215 10	221 8	212 11	218 3	222 5

## INDEX NUMBERS.

(Base : Weighted Average Wage for Australia (27s. 2d.), 30th April, 1914 = 1,000.)

31st December, 1939 ..	1,960	1,906	2,031	1,826	2,049	1,866	1,938
" " 1954 ..	7,314	7,367	6,994	7,339	7,007	7,236	7,285
" " 1955 ..	7,554	7,608	7,098	7,358	7,125	7,284	7,483
" " 1956 ..	7,981	7,955	7,406	7,635	7,423	7,649	7,846
" " 1957 ..	8,101	8,176	7,652	8,021	7,764	7,926	8,054
" " 1958 ..	8,216	8,282	7,944	8,160	7,837	8,033	8,187

(a) See note (a) to table at top of page 415. (b) As at 31st December, 1958.

It should be noted that because there was no tabulation for adult female rates prior to 1914, the base of these index numbers is 1914 and not 1911 as in the tables for adult males.

(v) *Adult Females—Industrial Groups.* The following table shows for Australia (a) the weighted average weekly rate of wage in each of the industrial groups in which the number of females employed is important, and (b) the weighted average for all groups combined, at the dates specified.

**WEEKLY WAGE RATES : ADULT FEMALES, INDUSTRIAL GROUPS, AUSTRALIA.**  
**WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK**  
**(EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES IN INDUSTRIAL GROUPS.(a)**

Date.	Industrial Group.					
	III. Food, Drink, etc.	IV. Clothing, Textiles, etc.	I., II., V., and VI. All Other Manufacturing.	XIII. Domestic, etc.(b)	XIV. Miscel- laneous.	All Groups.

**RATES OF WAGE.**

	<i>s. d.</i>					
31st December, 1939 .. ..	48 9	50 10	51 11	54 4	56 8	52 8
" " 1954 .. ..	191 2	196 6	201 8	188 11	209 11	197 11
" " 1955 .. ..	198 7	197 6	205 6	195 1	225 1	203 4
" " 1956 .. ..	210 9	205 2	215 8	205 11	238 8	213 2
" " 1957 .. ..	212 2	214 5	220 2	209 0	239 7	218 10
" " 1958 .. ..	214 9	217 10	223 4	212 7	243 11	222 5

**INDEX NUMBERS.**

(Base : Weighted Average Wage for All Groups (27s. 2d.), 30th April, 1914 = 1,000.)

31st December, 1939 .. ..	1,795	1,871	1,910	2,000	2,085	1,938
" " 1954 .. ..	7,036	7,232	7,422	6,951	7,725	7,285
" " 1955 .. ..	7,308	7,268	7,563	7,180	8,285	7,483
" " 1956 .. ..	7,757	7,551	7,936	7,580	8,782	7,846
" " 1957 .. ..	7,808	7,890	8,102	7,691	8,818	8,054
" " 1958 .. ..	7,904	8,018	8,219	7,824	8,976	8,187

(a) See note (a) to table at top of page 415.

(b) Includes the value of keep, where supplied.

3. *Hourly Wage Rates.*—(i) *General.* The average rates of wage in the preceding tables are based on the minimum rates prescribed for selected occupations in awards, etc., for a full week's work, excluding overtime. However, the number of hours constituting a full week's work differs in some instances between various trades and occupations in each State, and between the same trades and occupations in the several States. For some purposes a better comparison may be obtained by reducing the results in the preceding paragraphs to a common basis, namely, the rate of wage per hour. The particulars of weighted average nominal hourly rates of wage given in the following tables relate to all industrial groups except Groups XI. (Shipping, etc.) and XII. (Pastoral, Agricultural, etc.). These groups are excluded because for earlier years the hours of labour for some of the occupations included were not regulated either by awards or determinations of industrial tribunals or by legislation. As a result, the necessary particulars for the computation of average working hours and hourly rates of wage are not available.

(ii) *Adult Males—States.* The following table shows the weighted average nominal hourly rates of wage payable to adult male workers in each State at the dates specified.

## HOURLY WAGE RATES(a) : ADULT MALES.

WEIGHTED AVERAGE NOMINAL HOURLY RATES PAYABLE AND INDEX NUMBERS OF HOURLY RATES.

Date.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
RATES OF WAGE. (Pence.)							
31st December, 1939 ..	27.41	25.60	27.62	23.62	27.94	23.97	26.55
" " 1954 ..	86.20	83.97	80.35	82.19	87.42	85.32	84.51
" " 1955 ..	90.22	87.73	82.51	83.22	91.48	86.65	87.87
" " 1956 ..	96.04	92.00	87.99	86.28	95.14	91.19	92.75
" " 1957 ..	96.48	93.95	88.79	89.77	97.62	93.59	94.16
" " 1958 ..	97.71	94.96	93.21	91.59	98.17	95.30	95.76

## INDEX NUMBERS.

(Base : Weighted Average Wage for Australia (13.96d.), 30th April, 1914 = 1,000.)

31st December, 1939 ..	1,963	1,834	1,979	1,692	2,001	1,717	1,903
" " 1954 ..	6,175	6,015	5,756	5,888	6,262	6,112	6,054
" " 1955 ..	6,463	6,284	5,910	5,961	6,553	6,207	6,294
" " 1956 ..	6,880	6,590	6,303	6,181	6,815	6,532	6,644
" " 1957 ..	6,911	6,730	6,360	6,431	6,993	6,704	6,745
" " 1958 ..	6,999	6,802	6,677	6,561	7,032	6,827	6,860

(a) Weighted average hourly rates of wage for all industrial groups except Groups XI. (Shipping, etc.) and XII. (Pastoral, Agricultural, etc.). See para. 3 (i) on previous page. See also note (a) to table at top of page 415.

(iii) *Adult Females—States.* The following table shows the weighted average nominal hourly rates of wage payable to adult female workers in each State at the dates specified.

## HOURLY WAGE RATES(a) : ADULT FEMALES.

WEIGHTED AVERAGE NOMINAL HOURLY RATES PAYABLE AND INDEX NUMBERS OF HOURLY RATES.

Date.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
RATES OF WAGE. (Pence.)							
31st December, 1939 ..	14.56	13.99	15.05	12.96	14.72	13.49	14.24
" " 1954 ..	59.62	60.05	57.01	59.82	57.11	58.98	59.38
" " 1955 ..	61.57	62.01	57.86	59.98	58.07	59.37	61.00
" " 1956 ..	65.05	64.84	60.36	62.24	60.50	62.35	63.95
" " 1957 ..	66.03	66.64	62.37	65.38	63.29	64.61	65.65
" " 1958 ..	66.97	67.51	64.75	66.51	63.88	65.48	66.73

## INDEX NUMBERS.

(Base : Weighted Average Wage for Australia (6.64d.), 30th April, 1914 = 1,000.)

31st December, 1939 ..	2,193	2,107	2,267	1,952	2,217	2,032	2,145
" " 1954 ..	8,979	9,044	8,586	9,009	8,601	8,883	8,943
" " 1955 ..	9,273	9,339	8,714	9,033	8,745	8,941	9,187
" " 1956 ..	9,797	9,765	9,090	9,373	9,111	9,390	9,630
" " 1957 ..	9,944	10,036	9,393	9,846	9,532	9,730	9,887
" " 1958 ..	10,086	10,167	9,751	10,017	9,620	9,861	10,050

(a) See note (a) to table at top of page 415.

4. **Weekly Hours of Labour.**—(i) *General.* The number of hours constituting a full week's work (excluding overtime) differs in some instances between various trades and occupations in each State and between the same trades and occupations in the several States. The particulars of weekly hours of labour given in the following tables relate to all industrial groups except Groups XI. (Shipping, etc.) and XII. (Pastoral, Agricultural, etc.). These groups are excluded because for earlier years the hours of labour for some of the occupations included were not regulated either by awards or determinations of industrial tribunals or by legislation. As a result, the necessary particulars for the computation of average working hours for these groups are not available.

(ii) *Adult Males—States.* The following table shows the weighted average nominal hours of labour (excluding overtime) prescribed in awards for a full working week in respect of adult male workers in each State and Australia at 31st December, 1939 and 1958, together with the corresponding index numbers.

There has been no change in the weighted average nominal hours of labour for adult males since 1951.

**WEEKLY HOURS OF LABOUR (EXCLUDING OVERTIME)(a) : ADULT MALES.**  
**WEIGHTED AVERAGE NOMINAL HOURS OF LABOUR (EXCLUDING OVERTIME) WORKED DURING A FULL WORKING WEEK AND INDEX NUMBERS OF HOURS OF LABOUR.**

Date.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>WEEKLY HOURS OF LABOUR.</b>							
31st December, 1939 ..	43.92	44.61	43.46	45.83	44.33	45.33	44.29
" " 1958 ..	39.99	39.98	40.00	40.00	39.51	40.00	39.95

**INDEX NUMBERS.**

(Base : Weighted Average for Australia (48.93), 30th April, 1914 = 1,000).

31st December, 1939 ..	898	912	888	937	906	926	905
" " 1958 ..	817	817	817	817	807	817	816

(a) Weighted average working hours per week for all industrial groups except Groups XI. (Shipping, etc.) and XII. (Pastoral, Agricultural, etc.). See para. 4 (i) above. See also note (a) to table at top of page 415.

(iii) *Adult Females—States.* The following table shows the weighted average nominal hours of labour (excluding overtime) prescribed in awards for a full working week for adult female workers in each State and Australia at 31st December, 1939 and 1958, together with the corresponding index numbers.

There has been no change in the weighted average nominal hours of labour for adult females since 1948.

**WEEKLY HOURS OF LABOUR (EXCLUDING OVERTIME)(a) : ADULT FEMALES.**  
**WEIGHTED AVERAGE NOMINAL HOURS OF LABOUR (EXCLUDING OVERTIME) WORKED DURING A FULL WORKING WEEK AND INDEX NUMBERS OF HOURS OF LABOUR.**

Date.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>WEEKLY HOURS OF LABOUR.</b>							
31st December, 1939 ..	43.88	44.42	44.01	45.96	45.38	45.10	44.36
" " 1958 ..	40.00	40.00	40.00	40.00	40.00	40.00	40.00

**INDEX NUMBERS.**

(Base : Weighted Average for Australia (49.08), 30th April, 1914 = 1,000).

31st December, 1939 ..	894	905	897	936	925	919	904
" " 1958 ..	814	814	814	814	814	814	814

(a) See note (a) to table at top of page 415.

5. **Nominal and "Real" Wage Rates.**—(i) *General.* Index numbers of wage rates are said to be *nominal* when they represent changes in the wage rates themselves but are described as *real* when they represent changes in equivalent purchasing power, that is, the purchasing power of the corresponding wages in terms of some definite composite unit or list of items the cost of which can be ascertained at different times.

Prior to 1936, it was the practice of this Bureau to compute *real* wage rate index numbers by dividing the nominal wage rate index numbers by the corresponding retail price index numbers for food, groceries and rent of all houses ("A" Series). While wage rates were generally varied on the basis of the "A" Series index numbers, there was a good deal to be said for this procedure. When the Commonwealth Court of Conciliation and Arbitration abandoned the "A" Series, the merits of the "C" Series for "deflating" nominal wage rates were strengthened and *real* wages to the end of 1937 were measured in terms of their purchasing power over both the "A" and "C" Series. Since 1938, when computation of the "A" Series was discontinued, *real* wages have been measured in terms of their purchasing power over the "C" Series only. The "C" Series covers food, groceries, rent of four and five roomed houses, clothing and miscellaneous household requirements.

A graph showing nominal and *real* wage rate index numbers for the period 1911 to 1958 appears on page 403.

(ii) *Nominal Weekly Wage Rate Index Numbers.* The following table shows, for the period 1911 to 1958, index numbers of the weighted average nominal weekly rates of wage payable for adult males in each State, the weighted average rate for Australia in 1911 being taken as the base (= 1,000). These results are based generally upon rates of wage prevailing in the capital city of each State, but in certain industries, such as mining, rates are necessarily taken for places other than the capital cities. The index numbers for 1911 are based on rates current at the end of December, 1911, annual averages not being available. For 1914 and subsequent years, however, the index numbers are based on the average of the rates operative at the end of each of the four quarters.

#### NOMINAL WEEKLY WAGE RATE(a) INDEX NUMBERS : ADULT MALES.

(Base : Weighted Average Nominal Wage Rate(a) for Australia, 1911 = 1,000.)

State.	1911.	1914.	1921.	1929.	1931.	1939.	1955.	1956.		1957.	1958.
								(b)			
New South Wales	1,003	1,093	1,862	2,012	1,851	1,874	5,942	6,256	6,482	6,568	
Victoria ..	985	1,062	1,803	1,964	1,683	1,808	5,699	6,000	6,195	6,264	
Queensland ..	997	1,035	1,879	1,976	1,769	1,885	5,508	5,737	5,909	6,106	
South Australia ..	1,013	1,061	1,697	1,891	1,580	1,725	5,548	5,721	5,973	6,117	
Western Australia	1,152	1,223	1,832	1,960	1,745	1,956	5,869	6,084	6,320	6,363	
Tasmania ..	799	1,027	1,745	1,840	1,625	1,738	5,899	6,144	6,343	6,443	
Australia ..	1,000	1,081	1,826	1,972	1,752	1,846	5,773	6,050	6,261	6,361	

(a) For a full week's work (excluding overtime).

(b) Partly estimated.

(iii) *Real Wage Rate Index Numbers.* In obtaining the *real* wage rate index numbers in the following table, the nominal wage rate index numbers shown above have been divided by the corresponding retail price index numbers for the capital city and multiplied by 1,000. Since the "C" Series index numbers were not compiled for periods prior to November, 1914, it has been assumed that fluctuations in the "C" Series between 1911 (the base of the table) and 1914 would have been similar to the fluctuations observed in the "A" Series. A table showing *real* wage rate index numbers from 1901 to 1937 measured in terms of purchasing power over the "A" Series regimen appeared in earlier issues of the Official Year Book (see No. 37, page 473).

#### REAL WEEKLY WAGE RATE(a) INDEX NUMBERS : ADULT MALES.

Measured in terms of purchasing power over the "C" Series list of items.

(Base : Weighted Average Real Wage Rate (a) for Australia, 1911 = 1,000.)

State.	1911.	1914.	1921.	1929.	1931.	1939.	1955.	1956.		1957.		1958.		
								A.	B.	A.	B.	A.	B.	
New South Wales ..	..	925	1,073	1,130	1,210	1,207	1,469	1,493	1,459	1,492	1,494	1,479	1,486	
Victoria ..	..	954	1,084	1,164	1,200	1,180	1,453	1,451	1,409	1,461	1,457	1,455	1,457	
Queensland ..	..	1,022	1,227	1,290	1,336	1,306	1,501	1,521	1,493	1,509	1,520	1,475	1,489	
South Australia ..	..	914	1,034	1,099	1,137	1,147	1,421	1,432	1,398	1,459	1,461	1,448	1,454	
Western Australia ..	..	1,043	1,096	1,152	1,189	1,308	1,385	1,382	1,381	1,397	1,395	1,395	1,398	
Tasmania ..	..	902	984	1,108	1,120	1,153	1,447	1,412	1,390	1,416	1,421	1,413	1,423	
Australia ..	..	1,000	948	1,087	1,151	1,210	1,210	1,454	1,465	1,432	1,470	1,471	1,460	1,466

(a) For a full week's work (excluding overtime). (b) Based on the "C" Series retail price index, column A excluding and column B including, the price movement of potatoes and onions. See para. 5 on p. 399.

In earlier issues of the Official Year Book (see No. 39, page 410), a table was included showing similar index numbers for Australia as a whole under the "A" Series at intervals from 1901 to 1937 and under the "C" Series from 1901 to 1950.

## § 3. Average Weekly Wage Earnings.

1. **Average Weekly Total Wages Paid and Average Earnings, All Industries.**—The following figures are derived from employment and wages recorded on Pay-roll Tax returns (which cover approximately 73 per cent. of the estimated number of civilian wage and salary earners in employment) and from estimates of the unrecorded balance. Pay of members of the armed forces is not included. The figures are not seasonally adjusted, but a seasonally adjusted quarterly index of average weekly wage earnings is shown in para. 2 below. Corresponding figures for each quarter are published in the *Monthly Review of Business Statistics* and the *Monthly Bulletin of Employment Statistics*.

## AVERAGE WEEKLY TOTAL WAGES PAID AND AVERAGE EARNINGS.

(REVISED SERIES.)

Year.	N.S.W. (a)	Vic.	Q'land.	S. Aust. (b)	W. Aust.	Tas.	Aust.
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## AVERAGE WEEKLY TOTAL WAGES PAID.

(£'000.)

1953-54	16,480	11,767	5,227	3,615	2,754	1,305	41,148
1954-55	17,970	12,901	5,601	3,940	2,928	1,399	44,739
1955-56	19,764	14,144	6,033	4,330	3,104	1,521	48,896
1956-57	20,943	14,925	6,457	4,507	3,177	1,635	51,644
1957-58	21,664	15,510	6,585	4,635	3,284	1,671	53,349

## AVERAGE WEEKLY EARNINGS PER EMPLOYED MALE UNIT.(c)

(£.)

1953-54	16.69	16.64	14.98	15.87	15.59	15.78	16.26
1954-55	17.64	17.59	15.58	16.83	16.11	16.54	17.13
1955-56	18.92	18.78	16.49	17.88	16.92	17.75	18.28
1956-57	19.89	19.70	17.50	18.28	17.48	18.79	19.16
1957-58	20.44	20.22	17.94	18.68	18.05	18.95	19.67

(a) Includes the Australian Capital Territory. (b) Includes the Northern Territory. (c) Male units represent total male employment plus a proportion of female employment based on the approximate ratio of female to male earnings. The same ratio has been used in each State, and because the average ratio of female to male earnings may vary between States, precise comparisons between average earnings in different States cannot be made on the basis of the figures above.

2. **Average Weekly Wage Earnings Index Numbers.**—The following table shows, for "All Industries" and for "Manufacturing", the movement in average weekly wage earnings from 1945-46 to the December Quarter, 1958. The "All Industries" index is based on Pay-roll Tax returns and other data. The index for manufacturing industries for the years 1945-46 to 1957-58 is based on the average earnings of male wage and salary earners employed in factories as disclosed by annual factory returns (see Chapter VI.—Manufacturing Industry, § 8, para. 2 (iii)); figures subsequent to June, 1958 are preliminary estimates based on Pay-roll Tax returns.

The index numbers show for "All Industries" and "Manufacturing" the movement in average earnings over a period of time. However, they do not give, at any point of time, a comparison of actual earnings in the two groups. The base of each series is the year 1945-46 = 1,000 and both series have been seasonally adjusted.

AVERAGE WEEKLY WAGE EARNINGS<sup>(a)</sup> INDEX NUMBERS : AUSTRALIA.

REVISED SERIES (SEASONALLY ADJUSTED).

(Base of each Series : 1945-46 = 1,000.)

Year.	All Industries. <sup>(b)</sup>	Manufacturing. <sup>(c)</sup>	Quarter.	All Industries. <sup>(b)</sup>	Manufacturing. <sup>(c)</sup>
1945-46..	1,000	1,000	1955-56—March Qtr.	2,866	2,862
1946-47..	1,037	1,056	June ..	2,922	2,901
1947-48..	1,212	1,206			
1948-49..	1,374	1,365	1956-57—Sept. ..	2,979	2,945
1949-50..	1,513	1,505	Dec. ..	3,023	2,973
			March ..	3,020	2,962
1950-51..	1,816	1,809	June ..	3,038	2,995
1951-52..	2,221	2,219			
1952-53..	2,428	2,394	1957-58—Sept. ..	3,087	3,026
1953-54..	2,553	2,511	Dec. ..	3,105	3,066
1954-55..	2,682	2,685	March ..	3,093	3,075
			June ..	3,102	3,089
1955-56..	2,863	2,856			
1956-57..	3,015	2,969	1958-59—Sept. ..	3,178	3,148
1957-58..	3,097	3,064	Dec. ..	3,207	3,151

(a) Includes salaries. (b) Average earnings per male unit employed. Male units represent total male employment plus a proportion of female employment based on the approximate ratio of female to male earnings. (c) Average earnings of male wage and salary earners in factories.

## § 4. Basic Wages in Australia.

1. General.—The concept of a "basic" or "living" wage is common to rates of wage determined by industrial authorities in Australia. Initially the concept was interpreted as the "minimum" or "basic" wage necessary to maintain an average employee and his family in a reasonable state of comfort. However, it is now generally accepted "that the dominant factor in fixing the basic wage . . . is the economic or productivity factor and that the basic wage must be the highest that industry as a whole can pay".\*

Under the Commonwealth Conciliation and Arbitration Act 1904-1958 (see page 412), the Commonwealth Conciliation and Arbitration Commission (previously the Commonwealth Court of Conciliation and Arbitration) may, for the purpose of preventing or settling an industrial dispute extending beyond the limits of any State, make an order or award "altering the basic wage (that is to say, that wage or that part of the wage, which is just and reasonable for an adult male [female], without regard to any circumstance pertaining to the work upon which, or the industry in which he [she] is employed) or the principles upon which it is computed".

In the past, the Commonwealth Court of Conciliation and Arbitration held general basic wage inquiries from time to time and its findings applied to industrial awards within its jurisdiction. Prior to the decision of the Commonwealth Court of Conciliation and Arbitration, announced on 12th September, 1953, discontinuing the automatic adjustment of basic wages in Commonwealth awards in accordance with variations occurring in retail price index numbers, the relevant basic wage of the Commonwealth Court of Conciliation and Arbitration was adopted to a considerable extent by State Industrial Tribunals. In New South Wales and South Australia, the State industrial authorities adopted the relevant Commonwealth basic wage. In Victoria and Tasmania, where the Wages Boards systems operate, no provision was included in the industrial Acts for the declaration of a basic wage, although, in the past, Wages Boards generally adopted basic wages based on those of the Commonwealth Court. In Queensland and Western Australia, the determination of a basic wage is a function of the respective State Industrial or Arbitration Courts and (subject to State law) they took into account the rates determined by the Commonwealth Court. Following the decision of the Commonwealth Court of Conciliation and Arbitration to discontinue automatic quarterly adjustments to the basic wage, the various State industrial authorities have determined State basic wages in accordance with the provisions of their respective State industrial legislation. Details of the action taken in each State and subsequent variations in State basic wages are set out in para. 5 (see pp. 434-9).

In addition to the basic wage, "secondary" wage payments, including margins for skill, loadings and other special considerations peculiar to the occupations or industry, are determined by these authorities. The basic wage, and the "secondary" wage, where

\* Commonwealth Arbitration Reports, Vol. 44, p. 57.

prescribed, make up the "minimum" wage for a particular occupation. The term "minimum wage" as distinct from the basic wage is used currently to express the lowest rate payable for a particular occupation or industry.

2. **The Commonwealth Basic Wage.**—(i) *Early Judgments.* The principle of a living or basic wage was propounded as far back as 1890 but it was not until 1907 that a wage, as such, was declared by a Court in Australia. The declaration was made by way of an order in terms of section 2 (d) of the Excise Tariff 1906 in the matter of an application by H. V. McKay that the remuneration of labour employed by him at the Sunshine Harvester Works, Victoria, was "fair and reasonable". Mr. Justice Higgins, President of the Commonwealth Court of Conciliation and Arbitration, defined the standard of a "fair and reasonable" minimum wage for unskilled labourers as that standard appropriate to "the normal needs of the average employee, regarded as a human being living in a civilized community".\* The rate declared was 7s. a day or £2 2s. a week for Melbourne, the amount considered reasonable for "a family of about five".

The "Harvester" standard was adopted by the Commonwealth Court of Conciliation and Arbitration for incorporation in its awards, and practically the same rates continued until 1913, when the Court took cognizance of retail price index numbers, covering food and groceries and rent of all houses ("A" Series) for the 30 more important towns of Australia, which had been published by the Commonwealth Statistician for the first time in the preceding year. The basic wage rates for towns were thereafter varied in accordance with the respective retail price index numbers. Court practice was to equate the retail price index number 875 for Melbourne for the year 1907 to the "Harvester" rate of 42s. a week (or the base of the index (1,000) to 48s. a week). At intervals thereafter as awards came before it for review, the Court usually revised the basic wage rate of the award in proportion to variations in the retail price index. In some country towns, certain "loadings" were added by the Court to wage rates so derived to offset the effect of lower housing standards, and consequently of house rents, on the index numbers for these towns.

Over the period of its operation, the adequacy or otherwise of the "Harvester" standard was the subject of much discussion, the author of the judgment himself urging on several occasions the need for its review. During the period of rapidly rising prices towards the end of the 1914-18 War, strong criticism developed that this system did not adequately maintain the "Harvester" equivalent. A Royal Commission was appointed in 1919 to inquire as to what it would actually cost a man, wife and three children under fourteen years of age to live in a reasonable standard of comfort, and as to how the basic wage might be automatically adjusted to maintain purchasing power. The Commission's Report was presented in 1920. An application by the unions to have the amounts arrived at by the inquiry declared as the basic wage was not accepted by the Court because they were considerably in advance of existing rates and grave doubts were expressed by members of the Court as to the ability of industry to pay such rates. Further details of the recommendations of the Commission were given in *Labour Report* No. 40, page 106.

The system of making automatic quarterly adjustments to the basic wage in direct ratio to variations in the retail price index ("A" Series) was first introduced in 1921. The practice then adopted was to calculate the adjustments to the basic wage quarterly on the index number for the preceding quarter. Previously, adjustments had been made sporadically in relation to retail price indexes for the previous calendar year or the year ended with the preceding quarter. The practice adopted by the Commonwealth Court in 1921 of making automatic quarterly adjustments continued until the Court's judgment of 12th September, 1953 (see page 425).

In 1922, an amount known as the "Powers' 3s." was added by the Court as a general "loading" to the weekly basic wage for the purpose of maintaining during a period of rising prices the full equivalent of the "Harvester" standard. This loading continued until 1934.

(ii) *Basic Wage Inquiries, 1930-31, 1932, 1933.* No change was made in the method of fixation and adjustment of the basic wage until the onset of the depression, which began to be felt severely during 1930. Applications were then made to the Court for some greater measure of reduction of wages than that which resulted from the automatic adjustments due to falling retail prices. The Court held a general inquiry, and, while declining to make any change in the existing method of calculating the basic wage, reduced all wage rates under its jurisdiction by 10 per cent. from 1st February, 1931. In June, 1932, the Court refused applications by employee organizations for the cancellation of the 10 per cent. reduction of wage rates. In May, 1933, the Court again refused to cancel the 10 per cent. reduction in wage rates, but decided that the existing method of adjustment of the basic wage in accordance with the "A" Series retail price index number had resulted in some instances in a reduction of more than 10 per cent. In order to rectify this, the Court adopted the "D" Series of retail price index numbers for future quarterly adjustments of the basic wage.

\* 2 C.A.R., p. 3.

Particulars of the 1930–31 and the 1932 Inquiries may be found in *Labour Report* No. 22, pages 45–48 and of the 1933 Inquiry in *Labour Report* No. 23, pages 45–46.

(iii) *Basic Wage Inquiry*, 1934. A summary of the judgment delivered on 17th April, 1934, was given in Official Year Book No. 29, page 545. Until this judgment the "Harvester" standard, adjusted by variations in retail price index numbers, continued to be the theoretical basis of the wage of the Commonwealth Court. The new rate for the six capital cities was in effect the same as that previously paid under the "A" Series, without the "Powers' 3s." and without the 10 per cent. reduction which then ceased to operate.

Automatic quarterly adjustment of the basic wage was transferred from the "A" and the "D" Series to the "C" Series Retail Price Index. The base of the index (1,000) was taken by the Court as equal to 81s. a week. This gave rates as declared on this occasion for the capital cities on the basis of their respective index numbers ranging from 61s. for Brisbane to 67s. for Sydney and Hobart, the average wage for the six capital cities being 65s.

(iv) *Basic Wage Inquiry*, 1937. In May, 1937, the Commonwealth Court heard an application by the combined unions for an increase in the basic wage. The unions asked that the equivalent of the base (1,000) of the "C" Series Index be increased from 81s. to 93s., which on index numbers then current would have represented an average increase of about 10s. a week. The chief features of the judgment delivered on 23rd June were:—

(a) Amounts were added to the basic wage not as an integral, and therefore adjustable, part of that wage, but as "loadings" additional to the rates payable under the 1934 judgment, which were referred to in the judgment as the "needs" portion of the total resultant basic wages. These loadings, commonly referred to as "Prosperity" loadings, ranged, for capital cities, from 4s. to 6s., that for the six capitals being 5s.

(b) The basis of the adjustment of the "needs" portion of the wage in accordance with the variations shown by retail price index numbers was transferred from the "C" Series to a special "Court" Series based upon the "C" Series (see page 395).

(c) Female and junior rates were left for adjustment by individual Judges when dealing with specific awards.

The main parts of the judgment were reprinted in Official Year Book No. 30, pages 564–75 and in *Labour Report* No. 28, pages 77–87.

(v) *Basic Wage Inquiry*, 1940. On 5th August, 1940, the Full Court commenced the hearing of an application by the combined unions for an increase in the existing basic wage by raising the value of 1,000 (the base of the "C" Series Index upon which the "Court" Series was based) from 81s. to 100s. a week, and the incorporation of the existing "Prosperity" loadings in the new rate mentioned. In its judgment of 7th February, 1941, the Court unanimously refused to grant any increase, owing mainly to the uncertainty of the economic outlook under existing war conditions. The application was stood over for further consideration. (See (vi) following.)

The Chief Judge stated: "The Court has always conceded that the 'needs' of an average family should be kept in mind in fixing a basic wage. But it has never, as the result of its own inquiry, specifically declared what is an average family, or what is the cost of a regimen of food, clothing, shelter and miscellaneous items necessary to maintain it in frugal comfort, or that a basic wage should give effect to any such finding. In the end economic possibilities have always been the determining factor . . . what should be sought is the independent ascertainment and prescription of the highest basic wage that can be sustained by the total of industry in all its primary, secondary and ancillary forms".\*

The Chief Judge also suggested that the more logical system would be to grade the basic wage according to family responsibilities by means of a comprehensive system of child endowment, and that if a scheme of this nature were established, future fixations of the basic wage would be greatly simplified.†

(vi) *Interim Basic Wage Inquiry*, 1946. As the result of (a) an application made by the Commonwealth Attorney-General for the restoration to the Full Court List of certain adjourned 1940 basic wage applications (see (v) above), (b) a number of fresh cases which had come to the Court since 1941, and (c) an application by the combined unions for an "interim" basic wage declaration, the Court commenced the hearing of this case on 25th November, 1946. Judgment was delivered on 13th December, 1946 whereby an increase of 7s. a week was granted in the "needs" portion of the basic wage then current, the rate for the six capital cities as a whole being increased from 93s. to 100s. a week. For automatic quarterly adjustments a new "Court" Index (Second Series) (Base 1923–27 = 87.0) was adopted. All "loadings" on the basic wage were retained. Further particulars of this judgment may be obtained from *Labour Report* No. 38, page 79.

(vii) *Basic Wage Inquiry*, 1949–50. This finalized the case begun in 1940 and continued in 1946 (see above). Evidence was completed on 22nd August, 1950, and the three judges (Kelly C.J., Foster and Dunphy J.J.) delivered separate judgments on 12th October, 1950.

\* *Commonwealth Arbitration Reports*, Vol. 44, pp. 47–8. † Legislation covering a scheme to become operative on 1st July, 1941 was passed by the Commonwealth Parliament on 3rd April, 1941. For details see Chapter XVIII.—Welfare Services.

In these judgments, which were in the nature of general declarations, a majority of the Court (Foster and Dunphy *J.J.*) was of the opinion that the basic wage for adult males should be increased by £1 a week, and that for adult females should be 75 per cent. of the adult male rate. Kelly *C.J.*, dissenting, considered that no increase in either the male or the female wage was justified.

On 24th October, 1950, and 23rd November, 1950, the Court made further declarations regarding the "Prosperity" loading of 1937 (*see* page 424), which was being paid at rates between 3s. and 6s. a week according to localities, etc., and the future basis of quarterly adjustments. The "Prosperity" loading was standardized at a uniform rate of 5s. a week for all localities and was declared to be an adjustable part of the basic wage. The Court also declared that the "war" loadings were not part of the basic wage.

With regard to other "loadings" the Court, on 17th November, 1950, proceeded to examine the individual awards in the claims before it, for the purpose of determining to what extent such "loadings" formed part of the basic wage. Any "loading" declared to be part of the basic wage ceased to be paid as a separate entity, but apart from the special case of the Australian Capital Territory there were very few "loadings" which fell within this category.

The new rates operated from the beginning of the first pay-period in December, 1950, in all cases being the "needs" rate (Second Series) on the indexes of the September quarter 1950, plus a flat-rate addition of £1, together with the standardized "Prosperity" loading of 5s. (*see* above).

The basic wage rate for the six capital cities (weighted average) arrived at by the Court after applying the foregoing declarations was £8 2s., comprising £6 17s. "needs" (Second Series) plus 5s. uniform "Prosperity" loading plus the £1 addition. The declarations provided that the whole of this basic wage would be subject to automatic quarterly adjustments as from the beginning of the first pay-period commencing in February, 1951, on the basis of the index numbers for the December quarter, 1950. For this purpose the new rate of £8 2s. was equated to the "C" Series retail price index number 1572 for the six capital cities (weighted average) for the September quarter, 1950. From this equation was derived a new "Court" Index (Third Series) with 103.0 equated to 1,000 in the "C" Series Index.

The basic wage rates operative from the beginning of the first pay-period commencing in December, 1950, compared with those operative in November, 1950, were as follows (November rates in parentheses):—Sydney, £8 5s. (£7 6s.); Melbourne, £8 2s. (£7 3s.); Brisbane, £7 14s. (£6 15s.); Adelaide, £7 18s. (£6 17s.); Perth, £8 (£6 19s.); Hobart, £8 (£6 19s.); Six Capitals, £8 2s. (£7 2s.).

Further details of this judgment were given in *Labour Report* No. 40, page 81.

(viii) *Basic Wage and Standard Hours Inquiry*, 1952–53. On 5th August, 1952, the Commonwealth Court of Conciliation and Arbitration began hearing claims by—

- (1) The Metal Trades Employers' Association and other employers' organizations—
  - (a) that the basic wage for adult males be reduced ;
  - (b) that the basic wage for adult females be reduced ;
  - (c) that the standard hours of work be increased ;
  - (d) that the system of adjusting the basic wages in accordance with variations occurring in retail price index numbers be abandoned.
- (2) The Metal Trades Federation, an association of employees' organizations, that the basic wage for adult males be increased, which would also have resulted in increasing the amount, though not the proportion it bore to the basic wage for adult males, of the basic wage for adult females.

A number of Governments, organizations and other bodies obtained leave to intervene and in this role the Australian Council of Trade Unions supported the claims of the Metal Trades Federation.

The Court consisted of Kelly *C.J.*, Foster, Kirby, Dunphy, Wright, McIntyre and Morgan, *J.J.*, but before the hearing of evidence commenced Wright *J.* withdrew and during the hearing of the case Foster *J.* withdrew from the bench. The Court gave its decision on 12th September, 1953, and stated that reasons for its decision would be delivered later. McIntyre *J.* died before the reasons for the judgment could be delivered.

In the early stages of the case, the employers applied for an immediate and separate hearing of the question of suspension of the basic wage adjustment provisions in awards. However, after hearing argument, the Court indicated that it was not satisfied that a sufficient case had been made out for such a separate hearing.

Evidence in the employers' case began on 16th September, 1952. On completion of the employers' case, the counsel for employee organizations submitted that there was no case to answer and asked for the dismissal of the case. The Court rejected this claim and the hearing of evidence for the employee organizations was concluded on 11th September, 1953.

The decision of the Court, announced on 12th September, 1953, was expressed in the following terms :—

“ 1. The employers' applications for reduction of the current basic wages for adult males and for reduction of the current basic wages for adult females are refused.

2. The employers' applications for an increase of the standard hours of work in the industries covered thereby are refused.

3. The employers' applications for omission or deletion of clauses or sub-clauses providing for the adjustment of basic wages are granted.

4. The Unions' applications for increases of basic wages are refused.

The Court makes orders accordingly, to operate as from to-day. The reasons for the above decisions will be delivered at a later date. The form of the appropriate orders will be settled by the Industrial Registrar.” \*

The reasons for the above decisions were delivered on 27th October, 1953.

The Court in the course of its judgment said that in the present case nothing had been put before it in support of a departure from its now well established principle that the basic wage should be the highest that the capacity of the community as a whole could sustain. If the Court is at any time asked to fix a basic wage on a true needs basis, the question of whether such a method is correct in principle and all questions as to the size of the family unit remain open.

No evidence was submitted in the inquiry to suggest that the basic wage in its character of a “foundational wage” of providing, or helping to provide, a just and reasonable standard of living to employees whose income is based or dependent upon it, was inadequate, and the arguments of both the employers and employees were directed towards a basic wage based on the capacity of industry to pay.

The Court, in reviewing the claims of the respondents, in the light of the existing economic situation, indicated that although aware of the difficulties besetting industry and of the dependence of Australia's prosperity upon that large part of her productive effort whose rewards are conditioned by good seasons and whose prices are largely beyond her control, the Court was not satisfied that the employers had discharged the onus of proving that the existing situation called for a reduction of general standards either in the matter of the basic wage or in the ordinary working week. The Court was satisfied that there could be, in the existing situation, no increase in the basic wage, as was claimed by the Metal Trades Federation.

The Court decided to discontinue the principle of automatically adjusting the basic wage in accordance with variations in retail price index numbers while the basic wage was assessed on the capacity of industry. It was considered that “the further the Court has withdrawn from relating the basic wage to the fulfilment of any particular standard of needs, the less has become the justification for keeping the nominal wage ‘automatically adjusted’ during the currency of an award”.† Moreover, there was no ground for assuming that the capacity of industry to pay will be maintained at the same level or that it will rise or fall coincidentally with the purchasing power of money. The Court found that the system of automatic adjustments had undoubtedly been an accelerating factor in the rapid increase in prices in Australia, particularly in the years 1951 and 1952, and this factor supported the Court's decision to abolish the system.

In regard to the basic wage for female employees, the Court decided that no basis for a review of the existing ratio of the female to the male basic wage existed on the material presented to it, the Court being satisfied that industry had the capacity to maintain the existing female basic wage rates.

In rejecting the claim for an increase in the standard hours of work, the Court considered that the industry of the country was healthy and prosperous enough at present to sustain the existing standard (i.e., 40 hours a week).

The Court intimated that time would be saved in future inquiries if the parties to the disputes, in discussing the principle of the “capacity to pay”, directed their attention to the broader aspects of the economy, such as indicated by a study of employment, investment, production and productivity, overseas trade, overseas balances, the competitive position of secondary industry and retail trade.

In order to remove certain misconceptions about the function of the Court, it was stated during the course of the judgment that “the Arbitration Court is neither a social nor an economic legislature. Its function under section 25 of the Act is to prevent or settle specific industrial disputes”.‡ However, this function “must be exercised in the social and economic setting of the time at which it makes its decision. It must settle industrial disputes upon terms which seem to it to be just, having regard to conditions which exist at the time of its decision.” In addition, the Court stressed that “the primary rule that a claimant is required to substantiate his claim should always be observed”.

\* *Commonwealth Arbitration Reports*, Vol. 77, p. 486.

† *Ibid.*, p. 497.

‡ *Ibid.*, p. 506.

In accordance with its decision to abolish the automatic adjustment clause from its awards, the Court began, on 21st October, 1953, to deal with awards which were not actually affected by the original order. During this process the Court announced that it had no other method in mind in substitution of the automatic adjustment clauses. In fact the only issue before the Court was the abolition or retention of the adjustment principle and that issue had been determined. The basic wage as fixed by the Court in the new or amended clauses in awards was that which had become operative in August, 1953, and no provision was made for its automatic quarterly adjustment. The last such adjustment had been made on the "Court" Series Index for the June quarter, 1953.

After the Court had amended all the awards listed before it as a result of applications by one of the parties to the awards, the Court, on its own motion under section 49 of the Commonwealth Conciliation and Arbitration Act, listed those awards not the subject of an application by one of the parties and then proceeded to delete the clauses providing for the automatic adjustment of the basic wage.

The power of the Commonwealth Court of Conciliation and Arbitration to vary awards not the subject of an application by one of the parties was unsuccessfully challenged in the High Court of Australia.

(ix) *Basic Wage Inquiry*, 1956. On 14th February, 1956, the Commonwealth Court of Conciliation and Arbitration, consisting of Kirby, Dunphy, Wright and Morgan JJ., commenced hearing an application by the Amalgamated Engineering Union and others made by summons for alteration of the basic wage prescribed in the Metal Trades Award in the following respects:—namely, for an increase in the basic wage to the amount it would have reached if automatic quarterly adjustments deleted by the Court in September, 1953 had remained in force; an increase of a further £1 in the basic wage; the re-introduction of automatic quarterly adjustments; and the abolition of what is known as the 3s. country differential. This application was regarded as a general application for variation of the basic wage in all awards of the Commonwealth Court of Conciliation and Arbitration.

All the claims made by the unions were opposed by the respondent employers. The Attorney-General of the Commonwealth intervened in the public interest under section 26 (1) of the Commonwealth Conciliation and Arbitration Act, and in the course of proceedings all six States were represented by counsel or a State official.

Counsel for the Commonwealth stressed that the Commonwealth appeared not as a party but in the public interest and supplied much factual and statistical material in a review of the economy from 1953. He submitted that the Australian economy was to all appearances a prosperous economy, with two inherent weaknesses in the state of oversea trade and reserves and the rising tendency of costs and prices. The Commonwealth made no submission as to the amount of the basic wage; however, it submitted that the Court had been correct in its decision of 1953 to abolish the system of automatic quarterly adjustments and that its grounds for doing so were valid.

The States of New South Wales, Queensland, Western Australia and Tasmania supported the union claims for the re-establishment of the system of automatic adjustments and the raising of the basic wage to the levels indicated by current "C" Series index numbers, but made no submission at all regarding the union claims for a further increase of £1 a week for adult males. The State of South Australia opposed the re-introduction of automatic adjustments, but conceded that in making a review of the basic wage a substantial factor to be taken into account was the changed cost of living. However, as regards the union claim for an increase in the basic wage to the amount it would have reached if automatic quarterly adjustments deleted by the Court in September, 1953 had remained in force, together with a £1 increase in the basic wage, amounting in total to 35s. a week at that time, the State submitted without elaboration that there were grave doubts as to whether the increased basic wage to the extent asked by the applicant could be granted without serious damage to the economy. The State of Victoria neither supported nor opposed the union claims, either as an employer or as "representing all interests in the community", but supplied to the Court comprehensive statements relating to activities of the State Departments and instrumentalities and estimates of the amount and effects of the claims before the Court.

In delivering its judgment on 26th May, 1956, the Court rejected each claim made by the unions, but decided to increase the adult male basic wage by 10s. a week payable from the beginning of the first pay-period in June. As a result of this decision, the basic wage for adult females was increased by 7s. 6d. a week with proportionate increases for juniors of both sexes and for apprentices.

The Court took the view that its decision in 1953 to abandon the system of quarterly adjustments was clearly right and that "so long as the assessment of the basic wage is made as the highest which the capacity of the economy can sustain, the automatic adjustment of that basic wage upon price index numbers cannot be justified, since movements in the index

have no relation to the movements in the capacity of the economy".\* The Court was satisfied "that a basic wage assessed at the highest amount which the economy can afford to pay cannot in any way be arrived at on the current price of listed commodities. There is simply no relationship between the two methods of assessment".†

"The Court's examination of the economy and of its indicators—employment, investment, production and productivity, overseas trade, overseas balances, the competitive position of secondary industry and retail trade and its consideration of inflation and its possible disastrous extension has led to the Court's conclusion that the nation now has not the capacity to pay a basic wage of the amount to which automatic quarterly adjustments would have brought it."‡

As far as the application for the abolition of the 3s. country differential was concerned, the Court stated, "The onus lies on a party seeking a change of present prescription to establish its case. The Court holds that the present claim for abolition of the country differential of 3s. has not been made out on the evidence and submissions presented to the Court and the claim is rejected."§

In the course of setting out the reasons for its decision the Court considered the period over which the capacity of the economy should be assessed, and concluded: "A year has been found almost universally to be a sensible and practicable period for such a purpose in the case of trading institutions the world over. The Court considers—fortified by the Judges' experience of considering from time to time Australia's capacity—that a yearly assessment of the capacity of Australia for the purpose of fixing a basic wage would be most appropriate. We would encourage any steps to have the Court fulfil such a task each year . . . . .".¶

(x) *Basic Wage Inquiry, 1956-57.* Following a summons filed on 26th October, 1956 by the Amalgamated Engineering Union and others, the Commonwealth Conciliation and Arbitration Commission in Presidential Session (consisting of Kirby C.J., Wright and Ashburner J.J.) on 13th November, 1956 commenced to hear claims for alteration of the basic wage prescribed in the Metal Trades Award. The claims made were as follows:—

1. "For the increase of the basic wage in all its manifestations to the amount it would have reached if there had remained in the award provisions for automatic quarterly adjustments, which had been deleted in September, 1953 . . . . .".

2. "For the re-insertion in the award of the provisions for the automatic quarterly adjustment of the basic wage . . . . .".||

In accordance with past practice this application in respect of the Metal Trades Award was treated by the Commission as a general application for alteration of the basic wage in all Federal awards.

By leave of the Commission the Australian Council of Salaried and Professional Associations intervened in support of the applicant unions.

The claims of the unions were opposed by the respondent employers. Victoria and South Australia were the only States to appear before the Commission and the Attorney-General of the Commonwealth intervened in the public interest under section 36 (1.) of the Conciliation and Arbitration Act.

The State of South Australia opposed the unions' claims and suggested that if, contrary to that State's opposition, an increase in the basic wage were prescribed, the Commission should first decide upon the increase to be added to the six capitals basic wage and then apportion that increase amongst the six capital cities on a basis accurately reflecting the differences in cost of living in the different cities.

The State of Victoria neither supported nor opposed the application by the unions and during the hearing, at the request of the counsel for the employers, submitted statistics relating to Victorian State Government Departments and Instrumentalities.

The Attorney-General of the Commonwealth intervened in the public interest but the only issue on which his counsel made a positive submission was the application for the restoration of the automatic adjustment system. The Commonwealth opposed such a system whatever index were used. The Commonwealth did not make any submission in regard to the amount of the basic wage. However, counsel for the Commonwealth, after supplying information on all aspects of the national economy, made this general statement:—"It is submitted that it remains true that any steps that would lead to a general increase in the level of demand and of the level of costs and prices would run counter to the best interest of the Australian economy at the present time".¶ The Commonwealth also proposed that the Commission should, in the absence of an adjustment system, undertake an annual review of the basic wage.

\* *Commonwealth Arbitration Reports*, Vol. 84, p. 175. † *Ibid.*, p. 176. ‡ *Ibid.*, p. 177. § *Ibid.*, p. 179. || *Print No. A5436*, p. 3. ¶ *Ibid.*, p. 7.

The Commission decided that before it could reach a decision it would have to examine, in detail, three main issues, namely, (i) should the system of automatic adjustment be restored? (ii) should there be an increase in the basic wage and, if so, of what amount? and, (iii) should the increase, if there be one, be of a uniform amount or should it be variable as between capital cities?

(i) *Should the System of Automatic Adjustment be Restored?* The Commission set out the reasons why the Court in 1953 repealed the provisions for automatic quarterly adjustment of the basic wage then contained in awards and orders of the Court. "The Court's decision was primarily based on the view that there is no justification for automatically adjusting in accordance with a price index a wage assessed as the highest that the capacity of the community as a whole can sustain".\*

Counsel for the unions argued that the Court in 1956 had misdirected itself in holding that in its judgments given before 1953 it had been considering the capacity of the economy to bear the monetary wage at the time of making the decisions. He argued from judgments delivered in the period 1931 to 1950 that the Court was dealing with "the capacity of the economy to pay a real wage". The Commission stated that "Even if, contrary to the opinion of the Court in 1956, during that period [1931-1950] the Court had been considering the capacity to pay a real wage, . . . . . the fact is that in 1953 and 1956, the issue on those occasions having been expressly raised and fought, the Court held that capacity to pay cannot be measured by a price index".†

The argument of the unions' counsel continued "that it is a 'plain and inevitable principle' that the capacity of the community to pay wages alters with the general level of prices and that the "C" Series index approximately measures the general level of prices and therefore approximately measures the capacity of the economy to pay".‡

The Commission rejected both sections of the unions' argument and the claim for restoration of automatic quarterly adjustments was refused.

(ii) *Should there be an increase in the Basic Wage and, if so, of what Amount?* The Commission reaffirmed the principles used to determine the basic wage in the 1953 and 1956 judgments of the Court and accepted as correct the decision of the Court in 1956 to increase the then existing basic wages by 10s. This led the Commission to a comparison of the state of the national economy at the time of the 1956 and 1957 basic wage inquiries.

The Commission stated that "in assessing the highest basic wage that the community can afford to pay to employees covered by Federal awards, account has been taken of the fact that somewhere about half the wage earners in Australia are entitled under State awards to a basic wage, not fixed in relation to the capacity of the community to pay . . . . .".‡

The Commission considered all aspects of the economy and in particular the indicators of overseas reserves, overseas balances, rural industries, production and productivity other than rural, investment including company profits, the competitive position of secondary industry, employment, retail trade, the relaxed policy of import restrictions and the reasons of the government for such relaxation, and above all the change for the better in Australia's trading position and her strengthened reserves and decided that the basic wages in federal awards should be increased.

The Commission decided that the increase to the six capital cities basic wage should be 10s. a week for adult males.

(iii) *Should the increase be of a Uniform Amount?* The historical background of differential rates of basic wage for respective cities and towns was examined by the Commission and it acknowledged that the federal basic wage had two components. The first and greater component differs for each capital city and represents a rate of wage calculated by the use of "C" Series retail price index numbers for the June quarter, 1953, and the second component, common to all places, is the 10s. awarded by the Court in 1956.

On the question of whether the increase should be of a uniform amount, the alternatives open to the Commission appeared to be either to follow what the Court did in 1956, or to recalculate the inter-capital-city differentials of the newly-fixed standard basic wage according to the latest "C" Series index numbers. The Commission decided to grant

\* Print No. A5436, p. 9.

† Ibid., p. 10.

‡ Ibid., p. 12.

an increase of a uniform amount, and stated, "The immediate reason impelling the Commission to its decision is the evidence given in these proceedings by the Acting Commonwealth Statistician, in the course of which he expressed emphatically the opinion that the relative levels of living costs in Australian capital cities are not, and cannot be, measured by retail price index numbers in current circumstances; also that changes in relative living costs in this sense are a matter for consideration quite apart from retail price index numbers, at the same time conceding that some of the price index *data* could assist materially in measuring relative levels of living costs in Australian capital cities".\*

In the judgment delivered on 29th April, 1957 the Commission rejected the claims made by the unions and granted a uniform increase of 10s. a week in the basic wage for adult males to come into effect from the first pay-period to commence on or after 15th May, 1957. As a result of this decision the basic wage for adult females was increased by 7s. 6d., with proportionate increases for juniors of both sexes and for apprentices. The Commission also advised that it approved an annual review of the basic wage and would be available for this purpose in February, 1958. However, although favouring an annual review of the basic wage, the Commission considered that "it would not be proper for it nor would it wish to curtail the existing right of disputants to make an application at whatever time they think it necessary to do so."†

(xi) *Basic Wage Inquiry, 1958.*—On 18th February, 1958, the Conciliation and Arbitration Commission, constituted in Presidential Session by Kirby C.J. (President), Wright and Gallagher, J.J. (Deputy Presidents), commenced hearing an application by respondent unions for the following variations of the existing Metal Trades Award, namely:—

"By increasing the amounts of basic wage prescribed therein for respective cities, towns and localities to the figure they each would have reached had the quarterly adjustment system based on the "C" Series retail price index numbers been retained, plus an addition of 10s. to each basic wage, and by making provision for future adjustment of each of the new amounts at quarterly intervals by the application thereto of the same index numbers".‡

Applications by a large number of organizations of employees respondent to other awards of the Commission were joined with the application described above and treated as involved in the inquiry.

The claims for the restoration of quarterly adjustments and for basic wage increases were opposed by private employers and by the State of South Australia, which also contended that as the cost of living was much lower in Adelaide than in Melbourne and Sydney, greater disparities in basic wage rates than then existed should be determined if, against its submission, any general increase in the basic wage were decided upon.

Tasmania was the only other State represented and it appeared, without making submissions, in support of the union's application.

The Attorney-General of the Commonwealth intervened in the public interest under section 36 (1.) of the Conciliation and Arbitration Act, making submissions as to the main trends of the Australian economy.

Leave to intervene was granted to the Professional Officers' Association of the Commonwealth Public Service, three other organizations of medical and scientific workers employed in the Commonwealth Public Service and the Australian Council of Salaried and Professional Associations.

In its judgment, delivered on 12th May, 1958, the Commission rejected the submission by counsel for the Professional Officers' Association "that if the Commission is satisfied that there is in the community capacity to pay a higher wage bill, consideration should be given to the question whether that increased capacity should be reflected in an increased basic wage only, or extended also to the marginal or secondary contents of aggregate wages and salaries".§ The Commission stated that it did not conceive it to have been the policy or principle adopted by the Court up to 1956, or the Commission in 1957, to determine the basic wage level without regard to the general level of secondary wages, and even if the submission were acceptable as a matter of policy "it would involve an unjustifiable straining of the language and intention of the legislation to enable a large number of disputes and Public Service cases concerning marginal claims to be marshalled simultaneously, and also contemporaneously with the customary large numbers of basic wage claims".||

The Commission also rejected the submission by counsel for the Australian Council of Salaried and Professional Associations that when the Commission looked at the capacity of industry to pay and gave an increase in the basic wage, it "always kept something in hand

\* Print No. A 5436, p. 20.

† *Ibid.*, p. 23.

‡ Print No. A 6079, p. 4.

§ *Ibid.*, p. 5.

|| *Ibid.*, p. 7.

for a marginal claim which would probably be coming up".\* In the opinion of the Commission, "the mere fact that the Court and the Commission have embraced and applied the doctrine of fixing the basic wage at the highest level which it is adjudged the economy can sustain is itself a refutation of any suggestion that some economic capacity has been 'kept in reserve' for the satisfaction of known or potential marginal claims".\*

The claim of the unions for the restoration of the 1953 basic wage standard was rejected by the Commission on the same grounds as in its 1957 judgment, in the course of which it remarked:—

"Upon its more distant retrospect of the 1953 situation the Commission feels that it would be most unsafe to assume that the economy was then, or thereafter, capable of sustaining that year's rate as a 'standard' in real terms".†

The Commission then considered the three specific issues before it, namely, (i) should the system of automatic adjustments be restored? (ii) should the basic wage be increased, and if so, by what amount? and (iii) should there be uniform or disparate increases?

(i) *Should the System of Automatic Adjustments be Restored?* In its 1957 judgment, the Commission rejected a similar application and in giving reasons for its decision then made it clear that it had rejected the argument advanced by counsel for the unions, namely, that the capacity of the community to pay wages alters with the general level of prices and therefore approximately measures the capacity of the economy to pay and that the "C" Series Index is a proper index for this purpose.

In this case, counsel for the unions submitted that the unions still regarded the "C" Series index as a proper guide for the determination of basic wage levels but that if this contention continued to be unacceptable to the Commission there should be an immediate decision upon principle and later, if need be, an inquiry in an effort to ascertain a proper price index. He also submitted that there should be, from time to time, additions to wages to afford to workers their proper share of increased productivity and efficiency and that, although the unions had never claimed that increments for increased productivity could under present circumstances be made by way of automatic adjustment, the objective of wage increases commensurate with price increases could best be achieved by the use of an automatic adjustment system.

After having considered the submissions and without hearing arguments against the proposition, the Commission, on 21st February, 1958, rejected the application for the restoration of automatic adjustments and for a deferred inquiry thereon.

In the reasons for its judgment, the Commission stated that there was nothing in the submission to justify a departure from the decisions of 1953, 1956 and 1957 to reject automatic wage adjustments and that the reasons for rejection given in the earlier decisions still applied with equal cogency. "It is the firm conviction of the Commission that alterations [in the basic wage] should be made, not in an arbitrary manner under regulation by an index of prices but only after a full and open inquiry at which all relevant points of view, those of employers, employees and of the public alike, receive due examination and consideration. The Commission is easy of access and applications for review of the basic wage are capable of being dealt with expeditiously".‡ The Commission also referred to its 1956 judgment, in which it was stated that a yearly assessment of the capacity of Australia for the purpose of fixing a basic wage would be most appropriate.

(ii) *Should the Basic Wage be Increased and if so by what Amount?* After hearing arguments for and against an increase in the basic wage rates, and submissions, mainly statistical, on behalf of the Commonwealth, the Commission was unanimously of the opinion that the position of the economy regarded as a whole was such as to justify an increase in the basic wage, but a difference of opinion existed as to what the amount of the increase should be.

A majority of the members, namely, Kirby, C.J. and Gallagher, J., took the view that there were a number of factors in the economy "which combine to make it unsafe and therefore undesirable in the interests of all to grant an increase higher than 5s. at the present time to a basic wage which was increased by the Court in 1956 and the Commission in 1957 to levels which they consider were the highest the economy could then sustain".§

On the other hand, Wright, J. considered that conclusions drawn from the material presented justified a basic wage level substantially higher than that proposed by the majority. This view was influenced to some extent, but by no means entirely, by the fact that unlike the

\* Print No. A 6079, p. 7. † Ibid., p. 8. ‡ Ibid., p. 12. § Ibid., p. 17.

majority he was convinced that the rates of basic wage resulting from the 1956 and 1957 increases might have been higher without unduly straining the capacity of the economy to sustain them.

Under section 68 of the Conciliation and Arbitration Act 1904–1956 the question was decided according to the decision of the majority.

Accordingly the decision of the Commission was that the rates of basic wage for adult males under Federal awards should each be increased by 5s. per week.

(iii) *Uniform or Disparate Increases?* The South Australian Government submitted that economically there was no scope at all for a basic wage increase anywhere in Australia; and, as in the 1957 inquiry, again pursued the question of inter-city differentials in those awards where it applies, as an answer to the union claim that the amount of the basic wage in Adelaide should be calculated by reference to the "C" Series retail price index numbers for that city. The substance of the State's case on inter-city differentials was that the actual cost of living was so much lower in Adelaide than in Melbourne and Sydney that greater disparities in basic wage rates than then existed should be determined by the Commission, if any general increase in the basic wage were decided upon. Subject to a stipulation that no reduction should be made in the existing basic wage rate for Adelaide, counsel for the South Australian Government claimed that that rate should be approximately 10 per cent. below the rate fixed for Sydney, instead of approximately 5 per cent. below, as it then was.

He also claimed that the proposal had the support of South Australian employers, but in the Commission's view the employers had not spoken unitedly or unanimously, nor had anyone supported the proposal as put to the Commission. It concluded that the claim must be rejected on the ground that it would not be wise or just to apply it in South Australia in view of the fact that it was neither sought nor supported by any other party, and its application to the Government and its instrumentalities alone was not sought.

The Commission also recorded its view that before it could accept the contention of the South Australian Government regarding inter-city differentials, it would need to be affirmatively decided "that the living costs and price fluctuations in that State comparatively with those in other States are capable of ascertainment to the degree of accuracy necessary for purposes of basic wage fixation; and that the differential principle of basic wage fixation based on living costs and price fluctuations in the different States is compatible with the 'capacity to pay' doctrine accepted and acted upon by the Court and this Commission since at least 1953".\*

The Commission indicated that the issues involved in inter-city differential wage rates were complex and could not be decided after a brief hearing. It was also recognized that Federal basic wages are anomalous in that as a matter of history they contain an ingredient decided in the past on a differential basis as well as an ingredient decided on a flat-rate basis.

"It goes without saying however that it is open to employers or unions generally or in combination or any of the States to make a substantive application for reconstruction of basic wages whether based on differential or flat-rate principles, but it seems that such an application would be more appropriate for investigation at a time when the question of a change in the amount of the basic wage is not under consideration by the Commission".†

In the judgment delivered on 12th May, 1958, the decisions of the Commission were given in the following terms:—

1. The claim for restoration of automatic quarterly adjustments is refused.
2. The claim of the South Australian Government for special treatment is refused.
3. The basic wages of adult male employees covered by Federal awards will be increased by a uniform amount of 5s. per week.
4. The new rates will come into effect from the beginning of the first pay-period commencing on or after 21st May instant subject to special cases".‡

"In the Metal Trades Award and in awards generally the basic wage for adult females is prescribed at 75 per cent. of the basic wage for adult males. The result of the increase of the basic wage for adult males by 5s. per week will be to increase the basic wage for adult females in these awards to 75 per cent. of the new basic wage for adult males.

In those awards which do not contain such a provision but which prescribe basic wages for adult females of a stated amount equal to 75 per cent. of that for adult males the rate will be re-calculated to give effect to this decision.

\* Print No. A 6079, p. 20.

† Ibid., p. 21.

‡ Ibid., p. 2.

In the Metal Trades and in many other awards, the rates for juniors and apprentices of both sexes are prescribed at a percentage of the basic wage for adults in which cases the existing provisions of the awards will cover proportionate increases for such juniors and apprentices. In awards which do not contain such provisions, applications may be made to the Commission and will be dealt with by the appropriate member of the Commission".\*

(xii) *Basic Wage Inquiry, 1959.*—Particulars of the claims made by employee organizations and the decision given will be found in the Appendix.

(xiii) *Rates Operative, Principal Towns.* The basic wage rates of the Commonwealth Conciliation and Arbitration Commission for adult males and females, operative as from the beginning of the first pay-period commencing on or after 21st May, 1958, were as shown in the following table:—

COMMONWEALTH BASIC WAGE : WEEKLY RATES (a), MAY, 1958.

City or Town.	Rate of Wage.		City or Town.	Rate of Wage.	
	Males.	Females.		Males.	Females.
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
New South Wales—			Western Australia—		
Sydney ..	13 8 0	10 1 0	Perth ..	13 1 0	9 15 6
Newcastle ..	13 8 0	10 1 0	Kalgoorlie ..	13 8 0	10 1 0
Port Kembla—			Geraldton ..	13 14 0	10 5 6
Wollongong ..	13 8 0	10 1 0	Five Towns(b)	13 2 0	9 16 6
Broken Hill ..	13 12 0	10 4 0	Tasmania—		
Five Towns(b) ..	13 7 0	10 0 0	Hobart ..	13 7 0	10 0 0
Victoria—			Launceston ..	13 3 0	9 17 0
Melbourne ..	13 0 0	9 15 0	Queenstown ..	12 18 0	9 13 6
Geelong ..	13 0 0	9 15 0	Five Towns(b)	13 5 0	9 18 6
Warrnambool ..	13 0 0	9 15 0	Thirty Towns(b)	13 1 0	9 15 6
Mildura ..	13 0 0	9 15 0	Six Capital		
Yallourn(c) ..	13 6 6	10 0 0	Cities(b) ..	13 1 0	9 15 6
Five Towns(b) ..	13 0 0	9 15 0	Northern Territory—		
Queensland—			Darwin ..	14 0 0	10 10 0
Brisbane ..	12 3 0	9 2 0	South of 20th		
Five Towns(b) ..	12 4 0	9 3 0	Parallel ..	13 7 0	10 0 0
South Australia—			Australian Capital		
Adelaide ..	12 16 0	9 12 0	Territory—		
Whyalla and Iron			Canberra ..	13 3 0	9 17 0
Knob(d) ..	13 1 0	9 15 6			
Five Towns(b) ..	12 15 0	9 11 0			

(a) Operative from the beginning of the first pay-period commencing on or after 21st May, 1958; female rates are 75 per cent. of male rates. (b) Weighted average. (c) Melbourne rate plus 6s. 6d. loading for males; 75 per cent. of male rate for females. (d) Adelaide rate plus 5s. for males; 75 per cent. of male rate for females.

The rate for provincial towns, other than those mentioned above, is 3s. less than that for their respective capital cities.

The following table shows the movements of this wage in all State capital cities and the six capital cities as a whole during the period 1939 to 1958.

**BASIC WAGE : WEEKLY RATES<sup>(a)</sup>, CAPITAL CITIES, PRESCRIBED BY COMMONWEALTH CONCILIATION AND ARBITRATION COMMISSION <sup>(b)</sup> FOR ADULT MALES.**

Date Operative. <sup>(c)</sup>	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Six Capitals.
	<i>s. d.</i>						
September, 1939 ..	81 0	81 0	76 0	78 0	77 0	77 0	79 0
November, 1941 ..	89 0	88 0	84 0	84 0	85 0	85 0	87 0
.. 1942 ..	97 0	97 0	91 0	93 0	91 0	92 0	95 0
.. 1943 ..	99 0	98 0	93 0	94 0	94 0	95 0	97 0
.. 1944 ..	99 0	98 0	93 0	93 0	94 0	94 0	96 0
.. 1945 ..	99 0	98 0	93 0	93 0	94 0	94 0	96 0
.. 1946 ..	101 0	99 0	94 0	95 0	95 0	97 0	98 0
December, 1946 ..	108 0	106 0	101 0	102 0	102 0	103 0	105 0
November, 1947 ..	112 0	109 0	105 0	106 0	106 0	107 0	109 0
.. 1948 ..	122 0	120 0	115 0	116 0	116 0	118 0	119 0
.. 1949 ..	132 0	130 0	125 0	126 0	129 0	128 0	129 0
.. 1950 ..	146 0	143 0	135 0	137 0	139 0	139 0	142 0
December, 1950 ..	165 0	162 0	154 0	158 0	160 0	160 0	162 0
November, 1951 ..	207 0	199 0	185 0	195 0	197 0	199 0	200 0
.. 1952 ..	237 0	228 0	216 0	229 0	228 0	230 0	231 0
August, 1953 <sup>(d)</sup> ..	243 0	235 0	218 0	231 0	236 0	242 0	236 0
June, 1956 ..	253 0	245 0	228 0	241 0	246 0	252 0	246 0
May, 1957 <sup>(e)</sup> ..	263 0	255 0	238 0	251 0	256 0	262 0	256 0
May, 1958 <sup>(f)</sup> ..	268 0	260 0	243 0	256 0	261 0	267 0	261 0

(a) Rates include prosperity loadings where applicable. (b) Prior to 30th June, 1956, Commonwealth Court of Conciliation and Arbitration. (c) Rates operative from the beginning of the first pay-period in the month indicated, unless otherwise stated. (d) Automatic adjustment discontinued (see p. 426). (e) Operative from the beginning of the first pay-period commencing on or after 15th May, 1957. (f) Operative from the beginning of the first pay-period commencing on or after 21st May, 1958.

A table showing basic wage rates from 1923 to 1958 was published in *Labour Report* No. 45, pages 184-7.

3. **Australian Territories.**—In the Northern Territory there are two basic wages operating, one in respect of areas north of the 20th parallel of South Latitude, generally referred to as the "Darwin" rate and the other in respect of areas south of that parallel and extending down to the 26th parallel (the "Port Augusta" rate).

The basic wage rates payable as from the beginning of the first pay-period commencing on or after 21st May, 1958, were:—"Darwin" rate, adult males, £14, adult females, £10 10s.; "Port Augusta" rate, adult males, £13 7s., adult females, £10.

In addition to the above rates, special loadings were prescribed in Northern Territory awards following the fixation of the basic wage rates operative from November, 1951.

In the Australian Capital Territory, the rates payable as from the beginning of the first pay-period commencing on or after 21st May, 1958, were £13 3s. for adult males and £9 17s. for adult females.

Further details of basic wage rates in the Northern Territory and the Australian Capital Territory may be found in *Labour Report* No. 45, pages 78-84.

4. **Basic Wage Rates for Females.**—Reference should be made to *Labour Report* No. 45, (pp. 72-78) for an account of the fixation of minimum rates and basic wages for adult females by the Commonwealth Court of Conciliation and Arbitration. At the end of the 1949-50 Basic Wage Inquiry the Commonwealth Court of Conciliation and Arbitration, by a majority decision, fixed a new basic weekly wage for adult females at 75 per cent. of the corresponding male rate from the beginning of the first pay-period commencing in December, 1950.

5. **State Basic Wages.**—(i) *New South Wales.* The first determination under the New South Wales Industrial Arbitration Act of a standard "living" wage for adult male employees was made on 16th February, 1914, by the Court of Industrial Arbitration. A Board of Trade established in 1918, with power to determine the "living" wage for adult male and female employees in the State, made numerous declarations from 1918 to 1925, but ceased to function after the Industrial Arbitration (Amendment) Act 1926 transferred its powers to the Industrial Commission of New South Wales as from 15th April, 1926.

The adult male rate was determined on the family unit of a man, wife and two children from 1914 to 1925 ; a man and wife only in 1927, with family allowances for dependent children ; and a man, wife and one child in 1929, with family allowances for other dependent children. However, with the adoption in 1937 of the Commonwealth basic wage, the identification of a specified family unit with the basic wage disappeared.

A table showing the variations in the living wages determined by the industrial tribunals of New South Wales up to 27th April, 1937 was published in earlier issues of the Official Year Book (see No. 37, page 481). From that date until November, 1955, the rates adopted followed the Commonwealth basic wage (see below).

Shortly after the Commonwealth Court of Conciliation and Arbitration announced its judgment in the 1937 Basic Wage Inquiry, the Government of New South Wales amended the Industrial Arbitration Act to make the State basic wage agree with the Commonwealth rate ruling in New South Wales, and to adopt, as far as practicable, the general principles of operation laid down by the Commonwealth Court.

The principle of supplementing wages by a payment in respect of dependent children under fourteen years of age was operative in New South Wales from July, 1927 until superseded by the Commonwealth Government Scheme operative from 1st July, 1941. A brief account of the main features of the system was given in Official Year Book No. 37, pages 485-6.

Further amendments to the Industrial Arbitration Act were made in 1950 to give effect to the new rates declared by the Commonwealth Court of Conciliation and Arbitration in the 1949-50 Basic Wage Inquiry.

Differential basic wage rates for country areas (except Broken Hill) and for employees under Crown awards were eliminated by an amendment of the Industrial Arbitration Act in 1951.

The decision of the Commonwealth Court of Conciliation and Arbitration in September, 1953, to discontinue the system of automatic adjustment of the basic wage consequent on changes in the "Court" Series retail price index numbers was considered by the New South Wales Industrial Commission. On 23rd October, 1953, it certified that there had been an alteration in the principles of fixation of the basic wage, and instructed that the automatic adjustment clause be deleted from awards, etc., within its jurisdiction.

As a result, the basic wages applicable for the State and operative from the beginning of the first pay-period commencing in August, 1953, remained unchanged until November, 1955, the rates for New South Wales (excluding Broken Hill) during this period being £12 3s. a week for adult males and £9 2s. for adult females.

In October, 1955, the Industrial Arbitration Act 1940-1955 was amended to provide for the automatic adjustment of the existing basic wage each quarter, in accordance with the movements in the Commonwealth Statistician's retail price index numbers. The first adjustment, based on the index number for the September quarter, 1955, represented the amount which would have been added to the basic wage if quarterly adjustments had not been suspended, and was made payable from the beginning of the first pay-period in November, 1955. The rates then payable were £12 13s. for adult males and £9 9s. 6d. for adult females.

Automatic quarterly adjustments were made for each subsequent quarter and the State basic wage payable in New South Wales (except Broken Hill) from the first pay-period in February, 1959, was £13 15s. for adult males and £10 6s. for adult females.

(ii) *Victoria*. There is no provision in Victorian industrial legislation for the declaration of a State basic wage. Wages Boards constituted from representatives of employers, employees and an independent chairman, for each industry group or calling, determine the minimum rate of wage to be paid in that industry or calling. In general, these Boards have adopted a basic wage in determining the rate of wage to be paid.

By an amendment to the Factories and Shops Act in 1934, Wages Boards were given discretionary power to include in their determinations appropriate provisions of relevant Commonwealth Awards. A further amendment to this Act in 1937 made it compulsory for Wages Boards to adopt such provisions of Commonwealth Awards. The 1937 Act, as amended, also gave Wages Boards power to adjust wage rates, "with the variation from time to time of the cost of living as indicated by such retail price index numbers published by the Commonwealth Statistician as the Wages Board considers appropriate". The Wages Boards thus adopted the basic wages declared by the Commonwealth Court of Conciliation and Arbitration and followed that Court's system of adjusting the basic wage in accordance with variations in retail price index numbers.

After the Commonwealth Court of Conciliation and Arbitration discontinued the system of automatic adjustment of the Commonwealth basic wage in September, 1953, a number of Wages Boards met in November, 1953, and deleted references to these adjustments.

However, an amendment to the Factories and Shops Act in November, 1953, required Wages Boards to provide for the automatic adjustment of wage rates in accordance with variations in retail price index numbers. From 1st July, 1954, the Factories and Shops Acts 1928–1953 were replaced by the Labour and Industry Act 1953. This was, in general, a consolidation of the previous Acts and retained the requirement providing for the automatic adjustment of wages in accordance with variations in retail price index numbers.

An amendment to the Labour and Industry Act proclaimed on 17th October, 1956, deleted the automatic adjustment provision and directed Wages Boards in determining wage rates to take into consideration relevant awards of, or agreements certified by, the Commonwealth Conciliation and Arbitration Commission. As a result of this legislation the last automatic quarterly adjustment of the basic wage made was based on the variation in retail price index numbers for the June quarter, 1956. As from the beginning of the first pay-period in August, 1956, the basic wage rates have been £13 3s. for adult males and £9 17s. for adult females.

(iii) *Queensland.* The first formal declaration of a basic wage (£4 5s. for adult males) by the Queensland Court of Industrial Arbitration was gazetted on 24th February, 1921. Prior to this declaration the rate of £3 17s. a week for adult males had been generally recognized by the Court in its awards as the basic or living wage. The Queensland Industrial Conciliation and Arbitration Act provides that any basic wage declared must at least maintain an employee, his wife and family of three children in a fair and average standard of comfort.

The rates declared by the Queensland Court at various dates were shown in the table on page 89 of *Labour Report* No. 45.

From 21st April, 1942, the Queensland Industrial Court adopted the practice of making quarterly declarations of the basic wage on the basis of variations in the "C" Series retail price index number for Brisbane.

The Queensland Industrial Court granted increases of 7s. and 5s. to the basic wages for adult males and adult females respectively, payable from 23rd December, 1946, following the "interim" basic wage judgment of the Commonwealth Court of Conciliation and Arbitration announced earlier in December, 1946.

Following the decision of the Commonwealth Court of Conciliation and Arbitration to increase the male and female basic wages from December, 1950, the Queensland Industrial Court conducted an inquiry as to what change, if any, should be made to the State basic wage for Queensland. The Industrial Court granted an increase of 15s. a week to both adult males and adult females, operative from 7th December, 1950. The new male rate was identical with the Commonwealth basic wage for the Brisbane metropolitan area. The basic wage payable to adult females was approximately 66 per cent. of the male rate.

In January, 1953, the Queensland Industrial Court departed from the practice established in 1942 of varying the basic wage in accordance with quarterly variations in the "C" Series of retail price index numbers. If the practice had been continued, a reduction of one shilling would have been made in the basic wage for adult males from January, 1953. The Court was not satisfied, however, that the movement in the "C" Series index for Brisbane for the December quarter, 1952 was a true representation or reflex of the economic position for Queensland as a whole and so declined to make any alteration to the then existing basic wage. Quarterly adjustments were made for the next four quarters and the basic wage became £11 5s. for adult males from 1st February, 1954.

Commencing in March, 1954, a Basic Wage Inquiry was conducted by the Court and in its judgment of 11th June, 1954, the Court stated that there would be no change in the basic wage rates declared for February, 1954.

At subsequent hearings consequent on the movement in the "C" Series of retail price index numbers for Brisbane in respect of the quarters ended 30th June, 30th September and 31st December, 1954 and 31st March, 1955, the Court again decided not to vary the existing basic wage rates. However, after considering the "C" Series index number for the quarter ended 30th June, 1955 and its relation to the index number for the March quarter, 1955, the Court announced that, as these figures showed a continued upward trend of cost of living in 1955, the basic wage for adult males should be increased from £11 5s. to £11 7s. from 1st August, 1955. In this judgment, the Court emphasized that it holds itself free whether or not to adjust the basic wage upwards or downwards in accordance with movements in the "C" Series retail price index numbers.

The Court examined the movement in the "C" Series retail price index numbers for each subsequent quarter and announced variations in the basic wage. The rates payable in the Southern Division (Eastern District) from 2nd February, 1959, were £13 for adult males and £8 16s. 6d. for adult females.

The rates shown above are applicable throughout the Southern Division (Eastern District), which includes the metropolitan area; allowances to the adult male rate are added for the following divisions—Northern (Eastern District) 10s. 6d., Northern (Western District) £1 12s. 6d., Mackay 9s. and Southern (Western District) 10s. 6d. Allowances for adult females are half those for adult males.

(iv) *South Australia.* The Industrial Code, 1920–1958 provides that the Board of Industry shall after public inquiry declare the “living wages” to be paid to adult male and female employees. The Board has power also to fix different rates to be paid in defined areas.

The family unit was not specifically defined in the Code, but the South Australian Industrial Court in 1920 decided that the average employee in respect of whom the living wage is to be declared is a man with a wife and three children.

The first declaration by the Board of Industry was made on 15th July, 1921, when the living wage for adult male employees in the metropolitan area was determined at £3 19s. 6d. a week. A table showing the living wages declared from time to time was published on page 92 of *Labour Report* No. 45.

Following the “interim” increase in the “needs” basic wage of the Commonwealth Court of Conciliation and Arbitration announced on 13th December, 1946, the South Australian Government made a provision in the Economic Stability Act, 1946 for the declaration by the Governor of a living wage based on the Commonwealth basic wage for Adelaide. This action was taken because the Board of Industry had made a determination on 5th September, 1946, and under the Industrial Code was not able to make a further determination for six months.

The Industrial Code Amendment Act, 1949 made provision for the quarterly adjustment of the living wage in accordance with the variations in the Commonwealth basic wage for Adelaide. In effect, this made the State living wage and the Commonwealth basic wage equal from the beginning of the first pay-period commencing in February, 1950. The prescribed adjustment to the female living wage was seven-twelfths of that made to the Commonwealth male basic wage. The Board of Industry retained power to amend the living wage but any new living wage was to be adjusted quarterly as above.

Following the decision of the Commonwealth Court of Conciliation and Arbitration in the 1949–50 Basic Wage Inquiry, the South Australian Industrial Code was amended to provide for declarations of the living wage by proclamation to prevent unjustifiable differences between the State and Commonwealth rates of wage. By proclamation dated 30th November, 1950, the South Australian living wage in the metropolitan area was made identical with the December, 1950, rates fixed by the Commonwealth Court of Conciliation and Arbitration for the metropolitan area of South Australia. The female basic wage, which had been approximately 54 per cent. of the male basic wage, was increased to 75 per cent. of the corresponding male rate.

When the Commonwealth Court of Conciliation and Arbitration discontinued quarterly adjustments to Commonwealth basic wages in September, 1953, the South Australian living wage also ceased to be varied quarterly and since that time has remained the same as the Commonwealth basic wage for Adelaide. Following the basic wage inquiries conducted by the Commonwealth Court of Conciliation and Arbitration in 1956 and by the Commonwealth Conciliation and Arbitration Commission in 1956–57 and 1958, Commonwealth basic wages were increased on each occasion—for adult males two increases of 10s. a week and one of 5s., with proportionate increases for adult females. Similar increases were made to the South Australian living wage by proclamation of the Governor to make the rates payable identical with the Commonwealth basic wage for Adelaide. The rates operative from 26th May, 1958, were £12 16s. for adult males and £9 12s. for adult females.

(v) *Western Australia.* The Industrial Arbitration Act 1912–1952 provides that the Court of Arbitration may determine and declare a basic wage at any time on its own motion and must do so when requested by a majority of industrial unions or by the Western Australian Employers' Federation, with the limitation that no new determination shall be made within twelve months of the previous inquiry.

The term “basic wage” is defined in the Act as “a wage which the Court considers to be just and reasonable for the average worker to whom it applies”. In determining what is just and reasonable, the Court must take into account not only the “needs of an average worker” but also the “economic capacity of industry” and any other matters it deems relevant.

The Act provides that the Court of Arbitration may make adjustments to the basic wage each quarter if the statement supplied by the State Government Statistician showing the "C" Series retail price index numbers and monetary equivalents in terms of the State basic wages indicates that there has been a variation of 1s. or more a week compared with the previous quarter. These adjustments apply from the dates of declaration by the Court.

The first declaration of the basic wage by the Court of Arbitration, after the authority to fix one was vested in the Court in 1925, was made on 11th June, 1926. The family unit is not specifically defined in the Act, but it has been the practice of the Court to take as a basis for its calculations a man, his wife and two dependent children. Since that date the principal inquiries have been those of 1938, 1947, 1950 and 1951. A table showing annual and special declarations of the basic wage by the Court of Arbitration will be found in *Labour Report No. 45*, page 95.

Following the judgment of the Commonwealth Court of Conciliation and Arbitration in the 1949-50 Basic Wage Inquiry, the Western Australian Court of Arbitration resumed an inquiry which had been adjourned, to ascertain what change should be made in the State basic wage rates. In its judgment of 7th December, 1950, the Court decided that the basic wage should be increased by £1 a week for adult males and by 15s. a week for adult females. As the result of a subsequent inquiry, the basic wage for adult females was increased from 1st December, 1951 to 65 per cent. of the corresponding male rate. This was subject to the condition that the increase in the basic wage should be offset by the reduction in or deletion of existing margins between the basic wage and the total wage as specified by the appropriate award or determination.

Following the decision of the Commonwealth Court of Conciliation and Arbitration, in September, 1953, to discontinue quarterly adjustments to Commonwealth basic wages, the Western Australian Court of Arbitration exercised its discretionary power and declined to make any adjustments to the basic wage from November, 1953, to the June quarter, 1955.

However, from 9th August, 1955, the Western Australian Court decided to increase the adult male basic wage by 5s. 11d. a week for Perth and to make corresponding increases for other areas. No further change was announced in the basic wage until January, 1956, and for each subsequent quarter the Court has varied the State basic wages after considering the official statement supplied by the State Government Statistician.

The rates payable in the metropolitan area in February, 1959 were £13 13s. 5d. for adult males and £8 17s. 9d. for adult females.

(vi) *Tasmania.* A State basic wage is not declared in Tasmania. Wages Boards are constituted for a number of industries, from representatives of employers and employees and an independent chairman (who is common to all Wages Boards), and determine the minimum rate of wage payable in each industry. Until February, 1956, these Boards generally adopted the basic wages of the Commonwealth Court of Conciliation and Arbitration in determining the rate of wage to be paid.

The Wages Board Act gives Wages Boards power to adjust their wage rates in accordance with variations in cost of living as indicated by retail price index numbers published by the Commonwealth Statistician. When the Commonwealth Court discontinued the system of automatic adjustments of the basic wage in September, 1953, the Chairman of the Wages Boards stated he was of the opinion that automatic adjustment clauses should be deleted from all Wages Boards determinations. Before Wages Boards met to consider this matter, the wage rates for all determinations were automatically adjusted upwards from the beginning of the first pay-period commencing in November. By early December, 1953, all Wages Boards had met and deleted the automatic adjustment clause from determinations and cancelled the adjustment increases payable from November.

Automatic quarterly adjustments in accordance with movements in retail price index numbers were reintroduced by Wages Boards in February, 1956 and the rate payable from the first pay-period in February restored the basic wage to the level it would have reached if quarterly adjustments had not been discontinued in 1953. Following a rise in the retail price index number for the March quarter, 1956, a further basic wage increase was payable from the first pay-period in May, 1956.

The Employers' Federation of Tasmania sought a conference under section 77 of the Wages Boards Act 1920-1951 to consider an application to adopt the basic wage promulgated by the Commonwealth Court of Conciliation and Arbitration on 25th May, 1956, and for the deletion of automatic quarterly adjustment of the basic wage from determinations of Wages Boards. As a result of this application, a conference of organized bodies of employers and employees was convened by the Chief Secretary on 22nd June, 1956, to enable a discussion to take place on the advisability or otherwise of adopting the request of the Employers' Federation, so that the Chairman of Wages Boards could be fully informed at a representative gathering prior to the meeting of individual Wages Boards.

At the conclusion of the conference, the Chairman of the Wages Boards stated he was of the opinion that the adjustments should be suspended for a period in an endeavour to achieve some measure of stability. He also indicated that any Wages Board was competent by agreement between the representatives of employers and employees or majority decision to adopt the Commonwealth Court's basic wage or any other method of fixing the basic wage.

The majority of Wages Boards decided to suspend automatic quarterly adjustment after adopting the increase based on retail price index numbers for the June quarter, 1956 and payable from the first pay-period in August, 1956. The basic wage prescribed for Hobart by most Wages Boards was still unchanged in February, 1959, the rate being £13 12s. for adult males and £10 4s. for adult females.

(vii) *State Basic Wage Rates.* The "basic" wage rates of State industrial tribunals, operative in February, 1958, and February, 1959, are summarized in the following table:—

## STATE BASIC WAGES—WEEKLY RATES.

State.	February, 1958.			February, 1959.		
	Date of Operation. (a)	Males.	Females.	Date of Operation. (a)	Males.	Females.
		<i>s. d.</i>	<i>s. d.</i>		<i>s. d.</i>	<i>s. d.</i>
New South Wales—						
Metropolitan and Country, excluding Broken Hill .. .. .	Feb., 1958	269 0	201 6	Feb., 1959	275 0	206 0
Broken Hill .. .. .	Feb., 1958	271 0	203 0	Feb., 1959	274 0	205 6
Victoria(b) .. .. .	Aug., 1956	263 0	197 0	Aug., 1956	263 0	197 0
Queensland—						
Southern Division (Eastern District), including Brisbane .. .. .	27.1.58	244 0	164 6	2.2.59	260 0	176 6
Southern Division (Western District) .. .. .	27.1.58	251 4	168 2	2.2.59	270 6	181 9
Mackay Division .. .. .	27.1.58	249 6	167 3	2.2.59	269 0	181 0
Northern Division (Eastern District) .. .. .	27.1.58	254 0	169 6	2.2.59	270 6	181 9
Northern Division (Western District) .. .. .	27.1.58	261 4	173 2	2.2.59	292 6	192 9
South Australia(c) .. .. .	20.5.57	251 0	188 0	26.5.58	256 0	192 0
Western Australia—						
Metropolitan Area .. .. .	7.2.58	268 6	174 6	27.10.58	273 5	177 9
South-West Land Division .. .. .	7.2.58	270 1	175 7	27.10.58	273 4	177 8
Goldfields and other areas .. .. .	7.2.58	266 7	173 3	27.10.58	271 6	176 6
Tasmania(b) .. .. .	Aug., 1956	272 0	204 0	Aug., 1956	272 0	204 0

(a) Where dates are not quoted wage rates operate from the beginning of the first pay-period commencing in the month shown. (b) No basic wage declared. Rates shown are those adopted by most Wages Boards. (c) The "living wage" declared for the metropolitan area is also adopted for country areas, except at Whyalla where a loading of 5s. a week is generally payable.

## § 5. Wage Margins.

On 5th November, 1954, the Commonwealth Court of Conciliation and Arbitration delivered a judgment\* which, in effect, became a general determination of the basis upon which all relevant wage and salary margins should be assessed. This became known as the Metal Trades Case, 1954.

General principles of marginal rate fixation had previously been enunciated by the Court in the Engineers' Case of 1924, the Merchant Service Guild Case of 1942 and the Printing Trades Case of 1947, and the Court adopted these in so far as they were applicable to current circumstances.

"Margins" were defined as—

"minimum amounts awarded above the basic wage to particular classifications of employees for the features attaching to their work which justify payments above the basic wage, whether those features are the skill or experience required for the performance of that work, its particularly laborious nature, or the disabilities attached to its performance."

\* Commonwealth Arbitration Reports, Vol. 80, p. 3.

A brief account of the Metal Trades Case is as follows:—

The Amalgamated Engineering Union, the Electrical Trades Union and other employee organizations which were parties to the Metal Trades Award, 1952, filed applications during 1953 for increased margins for all workers covered by this award.

The applications came on for hearing before J. M. Galvin, C.C., who decided that they raised matters of such importance that, in the public interest, they should be dealt with by the Commonwealth Court of Conciliation and Arbitration. On 16th September and 6th October, 1953, the Conciliation Commissioner, pursuant to section 14A of the Conciliation and Arbitration Act, referred these applications to the Court.

The actual claims of the trade unions were that the marginal rate of 52s. a week payable to a fitter in the metal trades should be increased to 80s. a week (86s. for certain electrical trades) with proportionate increases for other award occupations. The margins then current, with a few exceptions, had been in existence since 1947. The employees' claims were in the nature of a test case to determine the attitude of the Court to applications for increased margins.

The Metal Trades Employers' Association and other respondents to the Metal Trades Award had counter-claimed that existing margins for skilled tradesmen should remain unaltered, while those paid to partly skilled or unskilled workers should be reduced.

The Court decided to take the Commissioner's two references together, and the matter came on for hearing before the Full Arbitration Court (Kelly C.J., Kirby, Dunphy and Morgan JJ.) in Melbourne on 13th October, 1953.

In a judgment delivered on 25th February, 1954, the Court held that a prima facie case had been made for a re-assessment of margins but that the economic situation at that time, particularly in regard to the level of costs, did not permit of such a comprehensive review. The Court decided that to avoid the creation of new disputes, to save expense and to obviate procedural difficulties, it would not reject the claims but adjourn them until 9th November, 1954.

On 25th and 26th August, 1954, summonses were filed by the employees' organizations for orders that proceedings in this case be brought forward and the hearing was resumed on 5th October, 1954.

In a judgment delivered on 5th November, 1954, the Court made an order re-assessing the marginal structure in the Metal Trades Award by, in general, raising the current amount of margin to two and a half times the amount of the margin that had been current in 1937. However, in cases in which the result of that calculation produced an amount less than the existing margin, the existing margin was to remain unaltered. In effect, this decision increased the margin of a fitter from 52s. a week to 75s. a week, increased similarly margins of other skilled occupations, and made no increase in margins of what may generally be described as the unskilled or only slightly skilled occupations under the Metal Trades Award.

At the end of its judgment the Court stated that, while its decision in this case related immediately to one particular industry, it was expected to afford general guidance to all authorities operating under the Conciliation and Arbitration Act or under other legislation which provided for tribunals having power to make reference, or being subject to appeal, to the Court, where the wage or salary may properly be regarded as containing a margin. The Court added observations for the guidance of these and of other tribunals "which may regard decisions of this Court as of persuasive authority".

Extracts from the judgment were set out in some detail in *Labour Report* No. 45, pages 98-105.

## E. EMPLOYMENT AND UNEMPLOYMENT.

### § 1. Employment.

1. **Total Occupied Persons.**—(i) *General.* The total number of occupied persons in Australia is obtained from the results of each population Census, supplemented by data in respect of Australian defence personnel serving outside Australia, who, in accordance with usual Census procedure, are not recorded in the Census. The figures shown below in sub-para. (ii) and (iii) are derived from the 1933, 1947 and 1954 Censuses, after making the adjustments referred to in the notes to the tables and in the accompanying text (sub-para. (ii)). They differ from the Census figures shown in Chapter IX.—Population for this reason and because of the distribution of "not stated" (*see p. 309*).

(ii) *Australia*. The figures in the table below are divided into three categories :— (a) defence forces ; (b) all persons fully occupied as employers, or as self-employed in businesses or on farms ; and (c) wage and salary earners employed, or occupied as casual, part-time, intermittent or seasonal workers. " Unemployed " persons (see explanation on page 446) are excluded.

All unpaid " helpers " in non-rural industry have been included with wage and salary earners. Male unpaid " helpers " in rural industry have been included with employers and self-employed persons, as it is considered that the majority of these are sons or other close relatives of farmers working in *de facto* partnership, or as learners with the farm owner. Unpaid female " helpers " on farms are fairly numerous. Generally they are occupied mainly in home duties, and, with all other women occupied in unpaid home duties, have been excluded from the category of occupied persons.

**TOTAL OCCUPIED PERSONS : AUSTRALIA, JUNE, 1933, 1947 AND 1954.**  
(‘000.)

June.	Defence Forces. (a)	Employers and Self-employed.			Wage and Salary Earners.			Total Occupied Civilians.	Total Occupied Persons, including Defence Forces. (a)
		Rural Industry.	Other Industries.	Total.	Rural Industry.	Other Industries.	Total.		
<b>MALES.</b>									
1933	5.8	293.5	249.0	542.5	200.1	989.8	1,189.9	1,732.4	1,738.2
1947	53.2	278.9	286.8	565.7	148.2	1,659.4	1,807.6	2,373.3	2,426.5
1954	(b) 50.9	279.2	316.9	596.1	154.2	2,020.3	2,174.5	2,770.6	2,821.5
<b>FEMALES.</b>									
1933	..	15.2	56.3	71.5	3.2	(c) 446.6	449.8	521.3	521.3
1947	0.8	13.8	55.8	69.6	8.1	(d) 659.9	668.0	737.6	738.4
1954	2.0	19.6	62.1	81.7	7.6	735.4	743.0	824.7	826.7
<b>PERSONS.</b>									
1933	5.8	308.7	305.3	614.0	203.3	1,436.4	1,639.7	2,253.7	2,259.5
1947	54.0	292.7	342.6	635.3	156.3	2,319.3	2,475.6	3,110.9	3,164.9
1954	52.9	298.8	379.0	677.8	161.8	2,755.7	2,917.5	3,595.3	3,648.2

(a) Includes those serving outside Australia. (b) Excludes approximately 10,300 males undergoing full-time National Service Training at the time of the Census. With the exception of full-time students these persons have been included in the figures of occupied civilians. (c) Includes females in private domestic service:—106,700 in 1933, 40,200 in 1947 and 29,600 in 1954. (d) Includes an estimate of 40,400 part-time workers not classified as wage earners at the Census.

The numbers of defence personnel serving outside Australia who were included in the defence forces shown in the table above were 13,843 males in 1947 and 5,903 males in 1954.

During the fourteen years from 1933 to 1947, the number of persons actually occupied at work increased by 905,400, or by an average of 64,700 persons per annum, whilst during the seven years from 1947 to 1954, the increase amounted to 483,300 or 69,000 per annum. Practically all of the increase in the number of occupied persons during the years 1947 to 1954 was due to the growth of the total available work force. During the previous intercensal period (1933 to 1947), the increase in the number of persons occupied comprised approximately 400,000 persons who had been unemployed in 1933 and approximately 500,000 growth in the total available work force.

The total numbers of employers, self-employed and wage and salary earners of both sexes classified at the Census as engaged in agricultural, pastoral and dairying industries (excluding female " helpers "—see above) declined from 512,000 in 1933 to 460,600 in 1954. There was very little movement in the figures between 1947 and 1954.

The proportion of male employers and self-employed in industries other than rural declined from 20.1 per cent. of occupied civilian males in these industries in 1933 to 14.7 per cent. in 1947, and to 13.6 per cent. in 1954. The corresponding proportion of female employers and self-employed declined from 11.2 per cent. of all occupied females in non-rural industries in 1933 to 7.8 per cent. in 1947, and remained constant at 7.8 per cent. in 1954. The increase in the number of male employers and self-employed in non-rural industries during the years 1947 to 1954 averaged only 4,300 a year. The average increase during the same period in the number of male wage and salary earners in these industries was 51,600 a year.

(iii) *States.* The following table shows the total numbers of occupied males and females in each State and Territory in June of 1947 and 1954, classified as defence forces, employers and self-employed persons, and wage and salary earners.

**TOTAL OCCUPIED PERSONS: STATES AND TERRITORIES,  
JUNE, 1947 AND 1954.**

('000.)

State or Territory.	Defence Forces. (a)		Employers and Self-employed.		Wage and Salary Earners.		Total Occupied Persons, including Defence Forces. (a)	
	June, 1947.	June, 1954.(b)	June, 1947.	June, 1954.	June, 1947.	June, 1954.	June, 1947.	June, 1954.
<b>MALES.</b>								
New South Wales ..	23.1	21.4	197.5	207.3	728.1	833.7	948.7	1,062.4
Victoria ..	15.9	15.0	158.1	167.1	490.5	596.9	664.5	779.0
Queensland ..	5.9	6.6	96.9	99.7	252.0	307.4	354.8	413.7
South Australia ..	2.6	2.3	51.8	55.5	153.3	194.1	207.7	251.9
Western Australia ..	3.4	3.1	39.8	44.3	116.6	156.1	159.8	203.5
Tasmania ..	0.8	0.8	20.1	20.2	57.8	71.9	78.7	92.9
Northern Territory ..	0.8	0.7	1.0	1.1	4.0	5.8	5.8	7.6
Australian Capital Territory ..	0.7	1.0	0.5	0.9	5.3	8.6	6.5	10.5
<i>Australia</i> ..	<i>53.2</i>	<i>50.9</i>	<i>565.7</i>	<i>596.1</i>	<i>1,807.6</i>	<i>2,174.5</i>	<i>2,426.5</i>	<i>2,821.5</i>
<b>FEMALES.</b>								
New South Wales ..	0.3	0.5	25.4	29.0	268.6	290.6	294.3	320.1
Victoria ..	0.4	0.8	22.5	25.3	202.0	227.0	224.9	253.1
Queensland ..	0.1	0.2	10.2	12.5	83.9	93.1	94.2	105.8
South Australia ..	..	0.1	5.2	7.0	52.9	59.9	58.1	67.0
Western Australia ..	..	0.1	4.3	5.6	39.2	46.6	43.5	52.3
Tasmania ..	..	0.1	1.8	2.1	18.9	21.7	20.7	23.9
Northern Territory ..	..	0.1	0.1	0.1	0.7	1.3	0.8	1.5
Australian Capital Territory ..	..	0.1	0.1	0.1	1.8	2.8	1.9	3.0
<i>Australia</i> ..	<i>0.8</i>	<i>2.0</i>	<i>69.6</i>	<i>81.7</i>	<i>668.0</i>	<i>743.0</i>	<i>738.4</i>	<i>826.7</i>
<b>PERSONS.</b>								
New South Wales ..	23.4	21.9	222.9	236.3	996.7	1,124.3	1,243.0	1,382.5
Victoria ..	16.3	15.8	180.6	192.4	692.5	823.9	889.4	1,032.1
Queensland ..	6.0	6.8	107.1	112.2	335.9	400.5	449.0	519.5
South Australia ..	2.6	2.4	57.0	62.5	206.2	254.0	265.8	318.9
Western Australia ..	3.4	3.2	44.1	49.9	153.8	202.7	203.3	255.8
Tasmania ..	0.8	0.9	21.9	22.3	76.7	93.6	99.4	116.8
Northern Territory ..	0.8	0.8	1.1	1.2	4.7	7.1	6.6	9.1
Australian Capital Territory ..	0.7	1.1	0.6	1.0	7.1	11.4	8.4	13.5
<i>Australia</i> ..	<i>54.0</i>	<i>52.9</i>	<i>635.3</i>	<i>677.8</i>	<i>2,475.6</i>	<i>2,917.5</i>	<i>3,164.9</i>	<i>3,648.2</i>

(a) Includes those serving outside Australia. (b) Excludes approximately 10,300 males undergoing full-time National Service Training at the time of the Census. See also footnotes to previous table.

The occupied population of Australia (including defence forces but excluding unemployed, pensioners, retired, persons of independent means and dependants) increased from 1947 to 1954 by 15.3 per cent. The percentage increase in each State and Territory

was as follows:—New South Wales, 11.2; Victoria, 16.0; Queensland, 15.7; South Australia, 20.0; Western Australia, 25.8; Tasmania, 17.5; Northern Territory, 37.9; and Australian Capital Territory, 60.7.

2. **Wage and Salary Earners in Civilian Employment.**—(i) *General.* Monthly estimates of the number of wage and salary earners in civilian employment (excluding employees in rural industry and female private domestics) are made by varying benchmark data obtained from a Census or quasi-Census on the basis of the movement in employment shown by Pay-roll Tax returns, annual Censuses of Factories, returns of Government employment and other direct collections. Monthly estimates are available from July, 1941, when Pay-roll Tax commenced. The figures at July, 1939 are based on the National Register.

Employment recorded on Pay-roll Tax returns at present covers approximately 77 per cent. of the estimated number of wage and salary earners in civilian employment (excluding employees in rural industry and female private domestics). Pay-roll Tax returns are lodged by all employers paying more than £200 a week in wages, other than certain Commonwealth Government Bodies, religious and benevolent institutions, public hospitals and other similar organizations specifically exempted under the Pay-roll Tax Assessment Act 1941–1957.

(ii) *Australia: Industrial Groups.* The following table shows total male and female wage and salary earners in civilian employment (excluding employees in rural industry, female private domestics, persons on the paid strength of the defence forces and National Service trainees in camp) subdivided to show the extent of employment provided by Government bodies and by private employers respectively. Principal industrial groups shown in the table include both private employees and Government employees, if any. (Current figures are published in the *Monthly Bulletin of Employment Statistics* and the *Monthly Review of Business Statistics*). The manufacturing employment figures published in this table comprise (i) the series showing actual monthly employment in factories as recorded at successive annual Censuses of Factories to June, 1958 (see Chapter VI.), with interim estimates for subsequent months, and (ii) estimates of the number of employees in industrial establishments outside the scope of the definition of a factory and persons employed by factory proprietors but engaged in selling and distribution.

#### WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT: INDUSTRIAL GROUPS, AUSTRALIA.

(Excluding Rural Wage Earners, Female Private Domestics, Personnel in Defence Forces and National Service Trainees in Camp.)

('000.)

Industrial Group.	July, 1939.	June, 1954.	June, 1955.	June, 1956.	June, 1957.	June, 1958.
MALES.						
Mining and Quarrying .. ..	52.2	58.7	58.3	57.3	56.3	51.6
Manufacturing, etc.(a) .. ..	456.1	798.7	826.2	842.1	845.1	857.2
Building and Construction .. ..	149.7	205.7	211.8	214.6	207.3	202.3
Transport(b) .. ..	158.2	238.7	244.7	245.9	245.1	242.1
Communication .. ..	27.7	61.4	64.0	64.5	67.9	69.7
Property and Finance .. ..	47.1	57.9	59.6	61.7	64.0	66.0
Retail Trade .. ..	212.6	128.4	129.2	129.9	129.4	132.5
Wholesale and Other Commerce .. ..		140.4	147.5	151.0	150.0	150.3
Public Authority Activity, n.e.i. .. ..	31.8	97.5	99.2	100.6	101.7	104.0
Health .. ..	17.8	25.9	26.0	26.8	27.1	27.5
Education .. ..	22.1	36.7	38.7	40.8	43.4	45.3
Personal Service .. ..	37.0	52.1	54.3	54.4	54.7	54.9
Other(c) .. ..	80.8	88.2	90.0	92.1	93.0	94.1
<i>Total</i> .. ..	<i>1,293.1</i>	<i>1,990.3</i>	<i>2,049.5</i>	<i>2,081.7</i>	<i>2,085.0</i>	<i>2,097.5</i>
Government(d) .. ..	349.8	581.4	599.1	604.9	609.5	621.8
Private .. ..	943.3	1,408.9	1,450.4	1,476.8	1,475.5	1,475.7
<i>Total</i> .. ..	<i>1,293.1</i>	<i>1,990.3</i>	<i>2,049.5</i>	<i>2,081.7</i>	<i>2,085.0</i>	<i>2,097.5</i>

NOTE.—For footnotes see next page.

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT : INDUSTRIAL GROUPS, AUSTRALIA—*continued.*

('000.)

Industrial Group.	July, 1939.	June, 1954.	June, 1955.	June, 1956.	June, 1957.	June, 1958.
<b>FEMALES.</b>						
Mining and Quarrying .. ..	0.3	1.0	1.1	1.2	1.2	1.1
Manufacturing, etc.(a) .. ..	169.0	239.0	245.7	249.9	250.4	251.7
Building and Construction .. ..	1.2	4.7	4.9	5.1	5.3	5.5
Transport(b) .. ..	5.2	18.7	19.7	20.7	20.4	20.3
Communication .. ..	7.4	17.8	18.7	19.4	19.7	19.6
Property and Finance .. ..	13.5	34.7	38.1	41.8	43.5	45.4
Retail Trade .. ..	101.4	115.3	121.6	122.9	121.3	125.4
Wholesale and Other Commerce						
Public Authority Activity, n.e.i. .. ..	10.0	27.3	28.6	29.1	29.2	29.8
Health .. ..	34.0	70.8	73.5	77.6	79.4	82.1
Education .. ..	32.0	44.9	47.9	50.5	53.8	56.1
Personal Service .. ..	43.0	67.0	69.6	70.2	69.5	68.7
Other(c) .. ..	20.1	36.2	37.3	38.4	39.3	39.5
<b>Total .. ..</b>	<b>437.1</b>	<b>719.7</b>	<b>751.7</b>	<b>773.1</b>	<b>779.8</b>	<b>792.1</b>
Government(d) .. ..	55.2	114.5	122.8	129.8	132.8	136.6
Private .. ..	381.9	605.2	628.9	643.3	647.0	655.5
<b>Total .. ..</b>	<b>437.1</b>	<b>719.7</b>	<b>751.7</b>	<b>773.1</b>	<b>779.8</b>	<b>792.1</b>

**PERSONS.**

Mining and Quarrying .. ..	52.5	59.7	59.4	58.5	57.5	52.7
Manufacturing, etc.(a) .. ..	625.1	1,037.7	1,071.9	1,092.0	1,095.5	1,108.9
Building and Construction .. ..	150.9	210.4	216.7	219.7	212.6	207.8
Transport(b) .. ..	163.4	257.4	264.4	266.6	265.5	262.4
Communication .. ..	35.1	79.2	82.7	83.9	87.6	89.3
Property and Finance .. ..	60.6	92.6	97.7	103.5	107.5	111.4
Retail Trade .. ..	314.0	243.7	250.8	252.8	250.7	257.9
Wholesale and Other Commerce						
Public Authority Activity, n.e.i. .. ..	41.8	124.8	127.8	129.7	130.9	133.8
Health .. ..	51.8	96.7	99.5	104.4	106.5	109.6
Education .. ..	54.1	81.6	86.6	91.3	97.2	101.4
Personal Service .. ..	80.0	119.1	123.9	124.6	124.2	123.6
Other(c) .. ..	100.9	124.4	127.3	130.5	132.3	133.6
<b>Total .. ..</b>	<b>1,730.2</b>	<b>2,710.0</b>	<b>2,801.2</b>	<b>2,854.8</b>	<b>2,864.8</b>	<b>2,889.6</b>
Government(d) .. ..	405.0	695.9	721.9	734.7	742.3	758.4
Private .. ..	1,325.2	2,014.1	2,079.3	2,120.1	2,122.5	2,131.2
<b>Total .. ..</b>	<b>1,730.2</b>	<b>2,710.0</b>	<b>2,801.2</b>	<b>2,854.8</b>	<b>2,864.8</b>	<b>2,889.6</b>

(a) Includes employees engaged in selling and distribution, who are outside the scope of the factory employment figures as defined and published in Chapter VI. (b) Includes road transport; shipping and stevedoring; rail and air transport. (c) Includes forestry, fishing and trapping; law and order; religion and social welfare; other professional; amusement, sport and recreation. (d) Includes employees of Commonwealth, State, Semi-Government and Local Government authorities. See para. 3 (i) below.

A graph showing wage and salary earners in civilian employment in the main industrial groups appears on page 404.

(iii) *States.* Statistics of total employment of wage and salary earners (excluding rural and female private domestic employment and defence forces) since 1933 are shown for each State and Territory in the following table.

### WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT.

(Excluding Rural Wage Earners, Female Private Domestics, Personnel in Defence Forces and National Service Trainees in Camp.)

('000.)

Year and Month.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
<b>MALES.</b>									
1933—June ..	379.8	288.1	139.3	80.3	70.0	28.9	1.0	2.4	989.8
1939—July ..	529.9	357.5	172.8	106.7	82.9	37.4	2.1	3.8	1,293.1
1954—June ..	771.3	556.8	269.6	176.8	139.1	63.6	4.9	8.2	1,990.3
1955—June ..	794.2	576.2	278.2	180.8	141.5	65.1	4.8	8.7	2,049.5
1956—June ..	808.5	583.2	282.4	187.9	140.5	65.7	5.0	8.5	2,081.7
1957—June ..	810.5	586.0	282.6	186.4	138.4	66.0	5.8	9.3	2,085.0
1958—June ..	814.5	592.9	282.8	186.0	138.6	67.0	5.6	10.1	2,097.5

### FEMALES.

1933—June ..	125.5	118.0	40.3	25.9	20.5	9.1	0.1	0.5	339.9
1939—July ..	168.0	142.9	53.2	34.0	26.2	11.6	0.2	1.0	437.1
1954—June ..	284.3	222.1	88.6	56.6	43.4	21.2	0.9	2.6	719.7
1955—June ..	297.4	232.4	92.1	59.8	44.3	21.8	1.0	2.9	751.7
1956—June ..	305.9	238.5	93.7	62.5	45.1	23.2	1.1	3.1	773.1
1957—June ..	309.3	240.4	95.8	62.4	44.5	22.9	1.2	3.3	779.8
1958—June ..	314.5	244.5	95.9	63.4	45.6	23.5	1.3	3.4	792.1

### PERSONS.

1933—June ..	505.3	406.1	179.6	106.2	90.5	38.0	1.1	2.9	1,329.7
1939—July ..	697.9	500.4	226.0	140.7	109.1	49.0	2.3	4.8	1,730.2
1954—June ..	1,055.6	778.9	358.2	233.4	182.5	84.8	5.8	10.8	2,710.0
1955—June ..	1,091.6	808.6	370.3	240.6	185.8	86.9	5.8	11.6	2,801.2
1956—June ..	1,114.4	821.7	376.1	250.4	185.6	88.9	6.1	11.6	2,854.8
1957—June ..	1,119.8	826.4	378.4	248.8	182.9	88.9	7.0	12.6	2,864.8
1958—June ..	1,129.0	837.4	378.7	249.4	184.2	90.5	6.9	13.5	2,889.6

(iv) *Factories.* Actual mid-monthly factory employment derived from the results of annual factory censuses is published in the Bulletin *Secondary Industries*, issued by this Bureau.

Additional tables regarding employment in factories may be found in Chapter VI.—Manufacturing Industry.

An index of factory employment in Australia, published in the *Monthly Review of Business Statistics*, shows that employment in factories reached a new post-war peak in March, 1959. For the year 1957–58, the index showed the level of employment in factories to be 97 per cent. higher than the average factory employment for the three years ended June, 1939.

3. *Government Employees.*—(i) *States and Territories.* The numbers of civilian employees of Commonwealth Government, State and Semi-Government and Local Government authorities in each State and Territory at June, 1958 are shown in the following table. These include all employees of government authorities on services such as railways, tramways, banks, post office, air transport, education, broadcasting, television, police, public works, factories and munitions establishments, migrant hostels, etc., as well as administrative employees, within Australia.

## CIVILIAN EMPLOYEES OF GOVERNMENT AUTHORITIES(a) : JUNE, 1958.

State or Territory.	Commonwealth.			State and Semi-Government.			Local Government.			Total.		
	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.
N.S.W. ..	58,372	15,207	73,579	134,812	28,016	162,828	26,888	2,985	29,873	220,072	46,208	266,280
Vic. ..	51,686	15,040	66,726	100,890	26,181	127,071	13,581	1,885	15,466	166,157	43,106	209,263
Qld. ..	18,405	4,866	23,271	55,423	8,315	63,738	17,869	956	18,825	91,697	14,137	105,834
S.A. ..	16,825	3,695	20,520	39,016	10,473	49,489	3,252	323	3,575	59,093	14,491	73,584
W.A. ..	9,340	2,233	11,573	39,451	7,173	46,624	3,607	356	3,963	52,398	9,762	62,160
Tas. ..	4,788	1,323	6,111	14,832	4,168	19,000	2,302	178	2,480	21,922	5,669	27,591
N.T. ..	2,767	714	3,481	..	..	..	104	5	109	2,871	719	3,590
A.C.T. ..	7,581	2,576	10,157	..	..	..	..	..	7,581	2,576	10,157	..
<b>Aust.</b>	<b>169,764</b>	<b>45,654</b>	<b>215,418</b>	<b>384,424</b>	<b>84,326</b>	<b>468,750</b>	<b>67,603</b>	<b>6,688</b>	<b>74,291</b>	<b>621,791</b>	<b>136,668</b>	<b>758,459</b>

(a) See explanation above.

(ii) *Australia.* The following table shows at June in each of the years 1954 to 1958, in comparison with 1939, the number of civilian employees of Commonwealth, State and Semi-Government and Local Government authorities.

## CIVILIAN EMPLOYEES OF GOVERNMENT AUTHORITIES(a) : AUSTRALIA.

June—	Commonwealth.			State and Semi-Government.			Local Government.			Total.		
	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.
1939(b) ..	56,099	11,764	67,863	235,066	40,586	275,652	58,637	2,887	61,524	349,802	55,237	405,039
1954 ..	156,604	41,579	198,183	363,095	67,466	430,561	61,643	5,493	67,136	581,342	114,538	695,880
1955 ..	160,840	44,291	205,131	373,238	72,728	445,966	65,026	5,771	70,797	599,104	122,790	721,894
1956 ..	162,314	46,114	208,428	377,077	77,587	454,664	65,558	6,138	71,696	604,949	129,839	734,788
1957 ..	165,566	45,612	211,178	378,055	80,825	458,880	65,854	6,376	72,230	609,475	132,813	742,288
1958 ..	169,764	45,654	215,418	384,424	84,326	468,750	67,603	6,688	74,291	621,791	136,668	758,459

(a) See explanation above. (b) July.

## § 2. Unemployment.

The total number of persons "unemployed" has been recorded only at the dates of the various Censuses. Prior to the 1947 Census, persons who were "unemployed" were requested to furnish particulars of the cause and duration of unemployment, but from 1947 onwards, the enquiry was broadened to include all persons (usually engaged in industry, business, trade, profession or service) who were out of a job and "not at work" at the time of the Census for whatever reason, including any not normally associated with unemployment. This change in the form of the questionnaire probably resulted in some variation in response. The following table sets out the number of persons recorded within these categories at the Censuses of 1933 to 1954. The percentage of "unemployed" at each date to all wage and salary earners, comprising those estimated to be in employment and those unemployed, is also shown.

## UNEMPLOYMENT (ALL CAUSES) : AUSTRALIA, CENSUSES, 1933, 1947 AND 1954.

Date.	Wage and Salary Earners Unemployed. ('000.)			Proportion of Wage and Salary Earners Unemployed. (Per Cent.)		
	Males.	Females.	Persons.	Males.	Females.	Persons.
June, 1933(a) ..	405.4	75.8	481.2	25.4	14.5	22.7
June, 1947(b) ..	66.6	16.9	83.5	3.5	2.5	3.2
June, 1954(b) ..	41.0	14.0	55.0	1.8	1.9	1.8

(a) As recorded at the Census. In addition there were considerable numbers of youths and young women of working ages who had never been employed and were "not at work" at the time of the Census.  
 (b) Persons in the work force who were "not at work" (see explanation above) at the time of the Census.

The following table shows the numbers of males and females "unemployed" or "not at work" classified according to cause of unemployment at the Censuses of 1933, 1947 and 1954. The change in the form of questionnaire after 1933 should be borne in mind.

## CAUSES OF UNEMPLOYMENT : AUSTRALIA, CENSUSES, 1933, 1947 AND 1954

Year.	Unable to Secure Employment.	Temporarily Laid Off.	Illness.	Accident.	Industrial Dispute.	Other and Not Stated.	Total.
MALES.							
1933 ..	374,569	(a)	18,083	4,702	1,595	6,483	405,432
1947 (b) ..	17,314	12,458	14,639	2,985	475	(c)18,743	66,614
1954 (b) ..	9,089	4,056	10,894	2,571	316	(c)14,088	41,014
FEMALES.							
1933 ..	62,630	(a)	9,193	434	95	3,465	75,817
1947 (b) ..	2,254	2,449	4,396	280	24	(c) 7,512	16,915
1954 (b) ..	3,369	1,267	3,939	291	15	(c) 5,119	14,000

(a) Not available. (b) See note (b) to previous table. (c) The majority of these persons were resting between jobs or changing jobs.

Details of the number of persons receiving unemployment and sickness benefits and the payments made may be found in Chapter XVIII.—Welfare Services.

## § 3. Commonwealth Employment Service.

Statutory warrant for the Commonwealth Employment Service (C.E.S.) is to be found in the Re-establishment and Employment Act 1945-1958 (sections 47 and 48). In brief, the main functions of the Service are to assist people seeking employment to obtain positions best suited to their training, experience, abilities and qualifications; and to assist employers seeking labour to obtain employees best suited to the demands of the employers' particular class of work.

The organization and functions of the C.E.S. accord with the Employment Service Convention 1948 and Recommendation 1948 of the International Labour Organization, which were respectively ratified and adopted by Australia in December, 1949.

The C.E.S. functions within the Employment Division of the Department of Labour and National Service, on a four-tiered decentralized basis. The Central Office is in Melbourne and there is a Regional Office in the capital city of each State, with 120 District Employment Offices in suburban and the larger provincial centres and 334 agents in the smaller country centres. The District Employment Offices are distributed as follows: New South Wales, 46; Victoria, 31; Queensland, 20; South Australia, 8; Western Australia, 9; Tasmania, 4; Northern Territory, 1; Australian Capital Territory, 1.

The C.E.S. provides specialized facilities for young people, persons with physical and mental handicaps, ex-service personnel, migrants, rural workers and persons with professional and technical qualifications.

Vocational guidance is provided, free of charge, in each State, other than New South Wales, by a staff of qualified psychologists. In New South Wales, a similar service is provided by officers of the New South Wales Department of Labour and Industry. Vocational guidance is available to any person, but is provided particularly for young people, ex-servicemen and the physically handicapped.

The C.E.S. has responsibilities in the administration of the unemployment and sickness benefits provided under the Social Services Act 1947-1958, and of the re-employment allowances provided under the Re-establishment and Employment Act 1945-1958 for certain classes of discharged members of the forces. All applicants for benefits or allowances must register at a District Employment Office or agency of the C.E.S., which is responsible for certifying whether or not suitable employment can be offered to them.

The C.E.S. is responsible for placing in employment migrant workers sponsored by the Commonwealth under the Commonwealth Nomination and similar schemes. This includes arranging for them to move to their initial employment and for their admission, if necessary, to Commonwealth migrant hostels. Assistance to obtain employment is provided to other migrants as required. From the inception of the various free and assisted schemes, including the Displaced Persons Scheme, to the end of December, 1958, about 180,000 British and European migrant workers had been placed in employment by the C.E.S.

Since 1951, the C.E.S. has been responsible for recruiting Australian experts for oversea service under the Colombo Plan and the United Nations Expanded Programme of Technical Assistance. The principal spheres in which experts have been supplied are agriculture, education, engineering, geology, health and economic and scientific research and development.

In association with its placement activities, the C.E.S. carries out regular surveys of the labour market and supplies detailed information to interested Commonwealth and State Government Departments and instrumentalities and to the public. It also advises employers, employees and other interested persons on labour availability and employment opportunities in various occupations and areas and on other matters concerning employment.

The C.E.S. is responsible for the medical examination and interview of young men for training in the Army under the National Service Act 1951-1957, which is administered by the Department of Labour and National Service. The Department also administers the provisions of the Act relating to the protection of the rights of National Service trainees in relation to their civil employment.

The Service completed its twelfth year of operation in May, 1958. During the year ended 30th June, 1958, there were 696,338 registrations of applicants for employment, of whom 426,839 were referred to employers and 302,172 placed in employment; 404,916 new vacancies were notified and vacancies unfilled at the end of June, 1958, numbered 15,958.

Prior to the setting up of the Commonwealth Employment Service, State Labour Exchange Organizations existed in several States, but they have been superseded. Details of the organization and administration of these exchanges are given in *Labour Report* No. 30, page 133.

#### § 4. Industrial Disputes.

1. **General.**—Detailed information regarding industrial disputes involving stoppage of work is given in the *Labour Report*.

Particulars of all disputes in progress during the year are included in the annual figures whether the dispute commenced in that year or was in progress at the beginning of the year. Consequently, details of "the number of disputes" and "workers involved" in disputes which commenced in any year and were still in progress during the following year will be included in the figures for both years.

2. **Industrial Groups.**—The following table gives, for Australia as a whole, particulars of industrial disputes which were in progress during 1958, classified according to industrial groups.

INDUSTRIAL DISPUTES (a): INDUSTRIAL GROUPS, AUSTRALIA, 1958.

Industrial Group.	Number.	Workers Involved.			Working Days Lost.	Estimated Loss in Wages (£.)
		Directly.	In-directly. (b)	Total.		
I. Wood, Furniture, etc. . . . .	1	80	..	80	30	120
II. Engineering, Metal Works, etc. . . . .	73	15,889	1,707	17,596	57,225	197,528
III. Food, Drink, etc. . . . .	40	8,890	2,860	11,750	37,677	154,501
IV. Clothing, Textiles, etc. . . . .	3	662	228	890	849	2,162
V. Books, Printing, etc. . . . .	2	182	110	292	1,893	7,320
VI. Other Manufacturing . . . . .	51	9,043	1,181	10,224	19,152	64,288
VII. Building . . . . .	55	8,385	403	8,788	34,343	120,816
VIII. (i) Coal-mining . . . . .	416	80,499	516	81,015	150,793	554,488
(ii) Other Mining, Quarries, etc. . . . .	8	2,299	177	2,476	3,131	13,160
IX. Railway and Tramway Services . . . . .	19	4,713	..	4,713	2,495	7,409
X. Other Transport . . . . .	26	5,949	..	5,949	13,287	52,503
XI. (i) Stevedoring . . . . .	256	134,095	..	134,095	108,493	379,590
(ii) Shipping, etc. . . . .	9	486	32	518	3,335	12,216
XII. Pastoral, Agricultural, etc. . . . .	1	143	..	143	445	1,025
XIII. Domestic, Hotels, etc. . . . .	4	335	..	335	898	1,944
XIV. Miscellaneous . . . . .	23	3,923	62	3,985	5,844	21,533
<b>Total . . . . .</b>	<b>987</b>	<b>275,573</b>	<b>7,276</b>	<b>282,849</b>	<b>439,890</b>	<b>1,590,603</b>

(a) Refers only to disputes involving a stoppage of work of 10 man-days or more. (b) Persons thrown out of work at the establishments where the stoppages occurred but not themselves parties to the dispute.

A graph showing, for the years 1949 to 1958, the working days lost as a result of industrial disputes in the main industrial groups will be found on page 405.

3. States and Territories.—The following table gives particulars of the number of industrial disputes in each State and Territory, together with the number of workers involved, and the losses in working days and wages caused by disputes which were current during each of the years 1939 and 1956 to 1958.

## INDUSTRIAL DISPUTES(a): STATES AND TERRITORIES.

State or Territory.	Year.	Number.	Workers Involved.			Working Days Lost.	Estimated Loss in Wages. (£.)
			Directly.	Indirectly. (b)	Total.		
New South Wales ..	1939	386	139,301	9,230	148,531	410,183	419,330
	1956	878	219,458	6,796	226,254	611,279	2,199,764
	1957	761	253,041	5,950	258,991	505,910	1,860,101
	1958	624	137,922	3,906	141,828	231,537	832,644
Victoria ..	1939	10	1,989	180	2,169	27,313	19,946
	1956	54	35,594	2,283	37,877	111,665	386,139
	1957	47	8,728	453	9,181	13,444	45,576
	1958	66	45,594	1,124	46,718	99,855	340,346
Queensland	1939	5	373	2	375	1,870	1,753
	1956	269	112,409	2,973	115,382	238,812	815,592
	1957	221	43,123	4,611	47,734	95,300	348,422
	1958	203	60,208	2,024	62,232	87,866	343,662
South Australia ..	1939	2	170	5	175	1,880	1,416
	1956	21	18,527	..	18,527	74,666	259,636
	1957	13	6,274	7	6,281	3,703	12,571
	1958	22	8,129	62	8,191	9,338	34,540
Western Australia ..	1939	7	1,108	145	1,253	14,100	9,578
	1956	14	9,780	1,341	11,121	31,944	111,504
	1957	14	5,352	..	5,352	3,068	10,801
	1958	20	10,847	160	11,007	2,970	10,382
Tasmania ..	1939	4	53	..	53	166	93
	1956	45	15,969	..	15,969	46,907	172,206
	1957	36	7,236	..	7,236	5,330	18,294
	1958	24	9,268	..	9,268	4,508	15,066
Northern Territory ..	1939	2	234	40	274	3,642	3,600
	1956	24	2,770	..	2,770	5,197	18,194
	1957	9	2,183	..	2,183	2,428	9,241
	1958	27	3,535	..	3,535	3,376	12,563
Australian Capital Territory	1939	..	..	..	..	..	..
	1956	1	83	..	83	913	4,026
	1957	2	58	27	85	1,030	3,616
	1958	1	70	..	70	440	1,400
Australia ..	1939	416	143,228	9,602	152,830	459,154	455,716
	1956	1,306	414,590	13,393	427,983	1,121,383	3,967,061
	1957	1,103	325,995	11,048	337,043	630,213	2,308,622
	1958	987	275,573	7,276	282,849	439,890	1,590,603

(a) Refers only to disputes involving a stoppage of work of 10 man-days or more. (b) Persons thrown out of work at the establishments where the stoppages occurred but not themselves parties to the dispute.

4. Duration.—The following table gives particulars of industrial disputes during 1958 in the three groups "Coal-mining", "Stevedoring" and "Other Industries", classified according to duration.

## DURATION OF INDUSTRIAL DISPUTES(a): AUSTRALIA, 1958.

Duration.	Coal-mining.	Steve-doring.	Other Indus-tries.	All Indus-tries.
NUMBER OF DISPUTES.				
1 day and less .. .. .	258	208	133	599
2 days and more than 1 day .. .. .	85	37	41	163
3 days and more than 2 days .. .. .	28	5	34	67
Over 3 days and less than 1 week .. .. .	21	2	29	52
1 week and less than 2 weeks .. .. .	19	3	45	67
2 weeks and less than 4 weeks .. .. .	4	1	23	28
4 weeks and less than 8 weeks .. .. .	1	..	8	9
8 weeks and over .. .. .	..	..	2	2
<b>Total</b> .. .. .	<b>416</b>	<b>256</b>	<b>315</b>	<b>987</b>

(a) Refers only to disputes involving a stoppage of work of 10 man-days or more.

## DURATION OF INDUSTRIAL DISPUTES(a): AUSTRALIA, 1958—continued.

Duration.	Coal-mining.	Stevedoring.	Other Industries.	All Industries.
<b>WORKERS INVOLVED.</b>				
1 day and less .. .. .	40,037	110,367	36,930	187,334
2 days and more than 1 day .. .. .	25,264	15,213	9,654	50,131
3 days and more than 2 days .. .. .	3,744	931	4,786	9,461
Over 3 days and less than 1 week .. .. .	7,435	731	4,615	12,781
1 week and less than 2 weeks .. .. .	3,819	4,993	5,186	13,998
2 weeks and less than 4 weeks .. .. .	622	1,860	5,478	7,960
4 weeks and less than 8 weeks .. .. .	94	..	1,054	1,148
8 weeks and over .. .. .	..	..	36	36
<b>Total .. .. .</b>	<b>81,015</b>	<b>134,095</b>	<b>67,739</b>	<b>282,849</b>

**WORKING DAYS LOST.**

1 day and less .. .. .	38,258	56,130	27,506	121,894
2 days and more than 1 day .. .. .	37,628	18,903	17,033	73,564
3 days and more than 2 days .. .. .	10,130	2,306	12,992	25,428
Over 3 days and less than 1 week .. .. .	25,753	2,437	16,661	44,851
1 week and less than 2 weeks .. .. .	28,411	26,125	30,090	84,626
2 weeks and less than 4 weeks .. .. .	7,323	2,592	50,322	60,237
4 weeks and less than 8 weeks .. .. .	3,290	..	24,410	27,700
8 weeks and over .. .. .	..	..	1,590	1,590
<b>Total .. .. .</b>	<b>150,793</b>	<b>108,493</b>	<b>180,604</b>	<b>439,890</b>

(a) Refers only to disputes involving a stoppage of work of 10 man-days or more.

5. Causes.—(i) *General.* In issues of the Official Year Book prior to No. 40 the causes of industrial disputes were classified in some detail for all industries combined. As from 1950, however, stoppages have been analysed in three separate groups, "Coal-mining", "Stevedoring" and "Other Industries". This dissection has been made because the pattern of the disputes in coal-mining and stevedoring differs significantly from that in other industries.

Under this classification, causes are grouped under four main headings:—(1) Wages, Hours and Leave; (2) Physical Working Conditions and Managerial Policy; (3) Trade Unionism; (4) Other Causes. The first group is restricted to disputes involving general principles relating to wages, hours and leave; minor questions regarding the claims to pay or leave by individual employees are included under managerial policy. The second group comprises disputes regarding physical working conditions and general questions of managerial policy, which term covers disciplinary action, the promotion of employees, the employment of particular individuals, personal disagreements between employees and supervisory staff and disputes arising from the computation of wages, leave, etc., in individual cases. The third group includes stoppages over employment of non-unionists, inter-union and intra-union disputes, disputes over recognition of union activities, and sympathy stoppages in support of employees in another industry. The last group comprises disputes by way of protest against situations not arising from the usual relationship of employer and employee, e.g., political matters, and cases (occurring mainly in the coal-mining industry) where the cause of the stoppage is not officially made known to the management.

As the items included under these headings differ somewhat from those included under the similar headings used for classifying causes of disputes in years prior to 1950, figures for 1950 and subsequent years are not strictly comparable with those for earlier years.

(ii) *Industry Groups.* The following table shows particulars of industrial disputes for 1958 classified according to cause in three industry groups:—

**CAUSES OF INDUSTRIAL DISPUTES(a): AUSTRALIA, 1958.**

Cause of Dispute.	Coal-mining.	Stevedoring.	Other Industries.	All Industries.
<b>NUMBER OF DISPUTES.</b>				
Wages, Hours and Leave .. .. .	6	2	65	73
Physical Working Conditions and Managerial Policy ..	242	188	200	630
Trade Unionism .. .. .	40	14	26	80
Other .. .. .	128	52	24	204
<b>Total .. .. .</b>	<b>416</b>	<b>256</b>	<b>315</b>	<b>987</b>
<b>WORKERS INVOLVED.</b>				
Wages, Hours and Leave .. .. .	936	787	14,138	15,861
Physical Working Conditions and Managerial Policy ..	36,398	85,496	36,835	158,729
Trade Unionism .. .. .	4,429	8,526	3,477	16,432
Other .. .. .	39,252	39,286	13,289	91,827
<b>Total .. .. .</b>	<b>81,015</b>	<b>134,095</b>	<b>67,739</b>	<b>282,849</b>
<b>WORKING DAYS LOST.</b>				
Wages, Hours and Leave .. .. .	2,463	191	53,560	56,214
Physical Working Conditions and Managerial Policy ..	86,362 <sup>a</sup>	82,304	110,587	279,253
Trade Unionism .. .. .	7,505	6,999	8,635	23,139
Other .. .. .	54,463	18,999	7,822	81,284
<b>Total .. .. .</b>	<b>150,793</b>	<b>108,493</b>	<b>180,604</b>	<b>439,890</b>

(a) Refers only to disputes involving a stoppage of work of 10 man-days or more.

(iii) *Summary, 1939 and 1954 to 1958.* The following table gives particulars of industrial disputes according to cause for the years 1939 and 1954 to 1958.

**CAUSES OF INDUSTRIAL DISPUTES(a): AUSTRALIA.(b)**

Cause of Dispute.	1939.	1954.	1955.	1956.	1957.	1958.
<b>NUMBER OF DISPUTES.</b>						
Wages, Hours and Leave .. .. .	96	100	201	107	75	73
Physical Working Conditions and Managerial Policy ..	197	975	887	792	674	630
Trade Unionism .. .. .	50	160	172	106	70	80
Other .. .. .	73	255	272	301	284	204
<b>Total .. .. .</b>	<b>416</b>	<b>1,490</b>	<b>1,532</b>	<b>1,306</b>	<b>1,103</b>	<b>987</b>
<b>WORKERS INVOLVED.</b>						
Wages, Hours and Leave .. .. .	29,290	42,923	139,522	130,526	62,708	15,861
Physical Working Conditions and Managerial Policy ..	56,783	214,060	184,449	149,208	151,863	158,729
Trade Unionism .. .. .	18,651	45,437	37,998	19,816	13,612	16,432
Other .. .. .	48,106	67,654	82,678	128,433	108,860	91,827
<b>Total .. .. .</b>	<b>152,830</b>	<b>370,074</b>	<b>444,647</b>	<b>427,983</b>	<b>337,043</b>	<b>282,849</b>
<b>WORKING DAYS LOST.</b>						
Wages, Hours and Leave .. .. .	128,525	136,738	467,591	667,964	181,839	56,214
Physical Working Conditions and Managerial Policy ..	189,510	413,118	398,147	295,633	321,422	279,253
Trade Unionism .. .. .	54,749	278,332	62,103	40,844	19,460	23,139
Other .. .. .	86,370	73,451	83,043	116,942	107,492	81,284
<b>Total .. .. .</b>	<b>459,154</b>	<b>901,639</b>	<b>1,010,884</b>	<b>1,121,383</b>	<b>630,213</b>	<b>439,890</b>

(a) Refers only to disputes involving a stoppage of work of 10 man-days or more. (b) Owing to the use of a new classification, figures for 1954 to 1958 are not strictly comparable with those for 1939.

6. *Results.*—In issues of the Official Year Book prior to No. 40, tables were included showing analyses of the results of industrial disputes over a period of years. This tabulation was discontinued because of the difficulty of obtaining the details necessary to make a classification in precise terms of the results of industrial disputes.

7. **Methods of Settlement.**—The following table shows particulars of industrial disputes for 1958 classified according to method of settlement, in three industry groups:—

**INDUSTRIAL DISPUTES(a): METHODS OF SETTLEMENT, AUSTRALIA, 1958.**

Method of Settlement.	Coal-mining.	Stevedoring.	Other Industries.	All Industries.
<b>NUMBER OF DISPUTES.</b>				
1. By private negotiation .. .. .	101	9	95	205
2. By mediation not based on legislation .. .. .	5	..	1	6
3. State legislation—				
(a) Under State Conciliation, etc., legislation .. .. .	1	..	54	55
(b) By reference to State Government officials .. .. .	3	..	1	4
4. Commonwealth and Commonwealth-State legislation—				
(a) Industrial Tribunals under—				
(i) Conciliation and Arbitration Act .. .. .	..	..	66	66
(ii) Coal Industry Acts .. .. .	35	..	..	35
(iii) Stevedoring Industry Act .. .. .	..	2	2	4
(iv) Other Acts .. .. .	..	..	..	..
(b) By reference to Commonwealth Government officials .. .. .	..	70	1	71
5. By filling places of workers on strike or locked out .. .. .	..	..	..	..
6. By closing down establishment permanently .. .. .	..	..	..	..
7. By resumption without negotiation .. .. .	271	175	95	541
8. By other methods .. .. .	..	..	..	..
<b>Total .. .. .</b>	<b>416</b>	<b>256</b>	<b>315</b>	<b>987</b>

**WORKERS INVOLVED.**

1. By private negotiation .. .. .	14,349	1,153	16,551	32,053
2. By mediation not based on legislation .. .. .	4,128	..	80	4,208
3. State legislation—				
(a) Under State Conciliation, etc., legislation .. .. .	97	..	9,487	9,584
(b) By reference to State Government officials .. .. .	2,406	..	365	2,771
4. Commonwealth and Commonwealth-State legislation—				
(a) Industrial Tribunals under—				
(i) Conciliation and Arbitration Act .. .. .	..	..	9,147	9,147
(ii) Coal Industry Acts .. .. .	7,465	..	..	7,465
(iii) Stevedoring Industry Act .. .. .	..	4,226	234	4,460
(iv) Other Acts .. .. .	..	..	..	..
(b) By reference to Commonwealth Government officials .. .. .	..	5,456	16	5,472
5. By filling places of workers on strike or locked out .. .. .	..	..	..	..
6. By closing down establishment permanently .. .. .	..	..	..	..
7. By resumption without negotiation .. .. .	52,570	123,260	31,859	207,689
8. By other methods .. .. .	..	..	..	..
<b>Total .. .. .</b>	<b>81,015</b>	<b>134,095</b>	<b>67,739</b>	<b>282,849</b>

**WORKING DAYS LOST.**

1. By private negotiation .. .. .	27,482	2,225	59,656	89,363
2. By mediation not based on legislation .. .. .	10,359	..	40	10,399
3. State legislation—				
(a) Under State Conciliation, etc., legislation .. .. .	194	..	36,789	36,983
(b) By reference to State Government officials .. .. .	3,626	..	730	4,356
4. Commonwealth and Commonwealth-State legislation—				
(a) Industrial Tribunals under—				
(i) Conciliation and Arbitration Act .. .. .	..	..	44,382	44,382
(ii) Coal Industry Acts .. .. .	21,031	..	..	21,031
(iii) Stevedoring Industry Act .. .. .	..	21,023	2,670	23,693
(iv) Other Acts .. .. .	..	..	..	..
(b) By reference to Commonwealth Government officials .. .. .	..	4,734	112	4,846
5. By filling places of workers on strike or locked out .. .. .	..	..	..	..
6. By closing down establishment permanently .. .. .	..	..	..	..
7. By resumption without negotiation .. .. .	88,101	80,511	36,225	204,837
8. By other methods .. .. .	..	..	..	..
<b>Total .. .. .</b>	<b>150,793</b>	<b>108,493</b>	<b>180,604</b>	<b>439,890</b>

(a) Refers only to disputes involving a stoppage of work of 10 man-days or more.

**F. WORKERS' COMPENSATION LEGISLATION.**

A conspectus of the principal provisions of Workers' Compensation Acts in force in Australia at 30th June, 1957 will be found in *Labour Report* No. 45, pages 135-43.

## G. LABOUR ORGANIZATIONS.

## § 1. Labour Organizations in Australia.

1. Registration.—(i) *Under Trade Union Acts.* In earlier issues of the Official Year Book (see No. 39, p. 448) reference was made to the registration of trade unions under the Trade Union Acts. In general the available information is inadequate for statistical purposes.

(ii) *Under State Industrial Legislation.* Information with regard to registrations of employers' associations and trade unions under the various State Industrial Arbitration Acts will be found in earlier issues of the Official Year Book (see No. 39, p. 448).

(iii) *Under the (Commonwealth) Conciliation and Arbitration Act.* Under Part VIII. of the Conciliation and Arbitration Act 1904–1958, any association of employers in any industry who have, or any employer who has, employed, on an average taken per month, not less than 100 employees during the six months preceding application for registration, or any association of not less than 100 employees in any industry, may be registered.\* Registered unions include both interstate associations and associations operating within one State only. Registration under Commonwealth legislation began in 1906. At the end of 1958, the number of employers' organizations registered under the provisions of the Conciliation and Arbitration Act was 60. The number of unions of employees registered at the end of 1958 was 158, with a membership of 1,466,709, representing 81 per cent. of the total membership of all trade unions in Australia.

2. Particulars regarding Trade Unions.—(i) *Types.* The trade unions in Australia are very diverse in character, and range from the small independent association to the large interstate organization, which, in its turn, may be a branch of an international body. Broadly speaking, there are four distinct classes of labour organizations :—(i) the local independent ; (ii) the State ; (iii) the interstate ; and (iv) the Australasian or international ; but a number of variations occur from each of these classes. The schemes of organization of interstate or federated unions vary greatly in character. In some unions, the State organizations are bound together under a system of unification with centralized control, while in others the State units are practically independent and self-governing, the federal bond being loose and existing only for one or two specified purposes.

(ii) *Number and Membership.* Returns showing membership by States as at 31st December each year are obtained for all trade unions and employee organizations. The affairs of single organizations are not disclosed in the published results and this has assisted in securing complete information. The Bureau is indebted to the secretaries of trade unions for their co-operation in supplying information. The following table shows the position at the end of 1939, 1957 and 1958.

TRADE UNIONS : NUMBER AND MEMBERSHIP.

State or Territory.	Number of Separate Unions.(a)			Number of Members.			Percentage Increase in Membership.(b)		
	1939.	1957.	1958.	1939.	1957.	1958.	1939.	1957.	1958.
New South Wales	200	235	231	358,391	737,358	731,375	3.4	0.2	- 0.8
Victoria ..	149	162	161	216,803	443,040	444,150	0.8	0.4	0.3
Queensland ..	114	133	131	180,653	310,821	313,744	6.5	- 1.3	0.9
South Australia	117	137	136	67,282	144,914	147,029	8.7	- 1.9	1.5
Western Australia	141	156	156	67,833	114,095	114,494	0.1	3.3	0.3
Tasmania ..	79	98	98	22,062	51,951	51,508	4.8	- 1.4	- 0.9
Northern Territory	4	21	20	761	2,408	2,433	5.6	2.4	1.0
Australian Capital Territory ..	15	33	30	1,685	5,567	6,485	9.6	- 6.5	16.5
Australia ..	380	373	370	915,470	1,810,154	1,811,218	3.4	- 0.1	0.1

(a) Without interstate duplication. See letterpress below.

(b) On preceding year.

NOTE.—Minus sign (—) denotes decrease.

\* Under the Public Service Arbitration Act an association of less than 100 employees may be registered as an organization, provided that its members comprise at least three-fifths of all persons engaged in the industry in the Service. Such organizations are included in the figures shown below.

In the preceding table, under the heading "Number of Separate Unions", a union reporting members in a State is counted as one union within that State. The figures by States do not add to the Australian total (shown in the last line) because a union represented in more than one State is included in the figure for each State in which it is represented, but is counted only once in the Australian total.

The collection of statistics relating to the number of branches of trade unions, appearing in issues of the Official Year Book prior to No. 39, has been discontinued.

(iii) *Classification in Industrial Groups.* The following table shows the number of unions and members thereof in Australia at the end of each of the years 1939, 1957 and 1958. Compared with that in 1939, membership in 1958 had increased by 98 per cent.

**TRADE UNIONS : INDUSTRIAL GROUPS, AUSTRALIA.**

Industrial Group.	1939.		1957.		1958.	
	No. of Unions. (a)	No. of Members.	No. of Unions. (a)	No. of Members.	No. of Unions. (a)	No. of Members.
I. Wood, Furniture, etc. ..	4	27,990	6	45,460	7	42,631
II. Engineering, Metal Works, etc. ..	22	99,731	15	270,798	15	275,273
III. Food, Drink, Tobacco, etc. ..	35	80,328	35	107,999	34	110,563
IV. Clothing, Textiles, etc. ..	12	68,847	7	101,967	7	96,239
V. Books, Printing, etc. ..	8	22,303	6	43,312	6	45,455
VI. Other Manufacturing ..	37	57,074	38	86,115	36	86,816
VII. Building ..	28	45,651	30	135,541	30	132,492
VIII. Mining, Quarrying, etc. ..	13	48,812	12	42,221	12	38,332
IX. Railway and Tramway Services ..	29	105,938	25	141,566	25	137,438
X. Other Transport ..	6	19,488	11	59,985	10	62,104
XI. Shipping, etc. ..	21	28,760	14	38,162	14	38,131
XII. Pastoral, Agricultural, etc. ..	5	40,276	3	62,028	3	61,120
XIII. Domestic, Hotels, etc. ..	18	13,177	12	39,196	12	40,441
XIV. Miscellaneous—						
(i) Banking, Insurance and Clerical ..	20	39,013	18	112,722	19	110,747
(ii) Public Service ..	50	89,848	66	216,200	66	227,033
(iii) Retail and Wholesale ..	8	36,290	12	73,238	12	74,736
(iv) Municipal, Sewerage and Labouring ..	11	46,552	10	87,740	10	82,260
(v) Other Miscellaneous ..	53	50,392	53	145,904	52	149,407
<b>Total .. ..</b>	<b>380</b>	<b>915,470</b>	<b>373</b>	<b>1,810,154</b>	<b>370</b>	<b>1,811,218</b>

(a) Without interstate duplication. See letterpress above.

(iv) *Number of Members and Proportion of Wage and Salary Earners.* The following table shows the estimated percentages of wage and salary earners in employment who are members of trade unions. The percentages for 1939 are based on the numbers of wage and salary earners recorded at the National Register of July, 1939. As current estimates of wage and salary earners in employment do not include employees engaged in rural industry or females in private domestic service, the percentages have been calculated on figures obtained by adding to the end of year estimates the number of employees in rural industry and females in private domestic service recorded at the Census of 30th June, 1954. For this reason, and also because the membership of trade unions includes some persons not in employment, the percentages shown in the table must be regarded as approximations.

**TRADE UNIONS : NUMBER OF MEMBERS AND PROPORTION OF TOTAL WAGE AND SALARY EARNERS, AUSTRALIA.**

Year.	Number of Members.			Proportion of Total Wage and Salary Earners. (Per cent.)		
	Males.	Females.	Persons.	Males.	Females.	Persons.
1939 .. ..	778,336	137,134	915,470	52	24	44
1954 .. ..	1,448,223	339,281	1,787,504	68	44	62
1955 .. ..	1,464,016	337,846	1,801,862	68	43	61
1956 .. ..	1,470,606	340,802	1,811,408	67	43	61
1957 .. ..	1,463,985	346,169	1,810,154	65	42	59
1958 .. ..	1,465,682	345,536	1,811,218	65	41	59

(v) *Interstate or Federated Trade Unions.* The following table gives particulars of the number and membership of interstate or federated trade unions in 1957 and 1958:—

**INTERSTATE OR FEDERATED TRADE UNIONS(a) : AUSTRALIA.**

Particulars.	Unions Operating in—					Total.	
	2 States.	3 States.	4 States.	5 States.	6 States.		
Number of Unions	1957 ..	15	8	22	33	64	142
	1958 ..	13	12	20	33	63	141
" " Members	1957 ..	31,281	64,510	206,839	383,194	892,089	1,577,913
	1958 ..	31,348	64,983	206,572	385,246	887,929	1,576,078

(a) Certain unions in this group have, in addition to branches in the States, branches in the Northern Territory and/or in the Australian Capital Territory.

The number of organizations operating in two or more States increased from 72 in 1912 to 141 in 1958, and the ratio of the membership of such organizations to the total membership of all organizations rose from 65 to 87 per cent. during the same period.

3. **Central Labour Organizations.**—Delegate organizations, consisting of representatives from a group of trade unions, have been established in each of the capital cities and in a number of industrial centres elsewhere. Their revenue is raised by means of a *per capita* tax on the members of each affiliated union. In most of the towns where such central organizations exist, the majority of the local unions are affiliated with the central organization, which is usually known as the Labour or the Trades Hall Council. In Western Australia, a unified system of organization extends over the industrial centres throughout the State. In this State, there is a provincial branch of the Australian Labour Party, having a central council and executive, and metropolitan and branch district councils, with which the local bodies are affiliated. The central council, on which all district councils are represented, meets periodically. In the other five States, however, the organization is not so close, and, while provision usually exists in the rules of the central council at the capital city of each State for the organization of district councils or for the representation of the central council on the local councils in the smaller industrial centres of the State, the councils in each State are generally independent bodies.

The table below shows the number of metropolitan and district or local labour councils, together with the number of unions and branches of unions affiliated therewith in each State at the end of the years 1957 and 1958:—

**CENTRAL LABOUR ORGANIZATIONS : NUMBER, AND UNIONS AND BRANCH UNIONS AFFILIATED.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	N.T.	A.C.T.	Total.
Number of Councils—									
1957 .. .. .	11	9	12	6	10	5	..	1	54
1958 .. .. .	11	9	12	6	10	5	..	1	54
Number of Unions and Branch Unions affiliated—									
1957 .. .. .	290	273	166	147	403	113	..	22	1,414
1958 .. .. .	297	269	171	150	400	113	..	23	1,423

The figures given in the preceding table concerning the number of unions do not necessarily represent separate unions, since the branches of a large union may be affiliated with the local trades councils in the several towns in which they are represented.

A Central Labour Organization, now called the Australian Council of Trade Unions, came into being during 1927. The Council was created to function on behalf of the trade unions of Australia, and was founded at an All-Australian Trade Union Congress held in

Melbourne in May, 1927. The A.C.T.U. consists of affiliated unions and affiliated Metropolitan and/or State Labour Councils and Provincial Councils. The Metropolitan or State Labour Council in each State is the State Branch of the A.C.T.U. and has the right to appoint one representative to act on the executive of the Council. In addition to the representatives of the State Branches of the A.C.T.U., six delegates are elected by and from Congress, one from each of the following industry groups of unions:—Building, Food and Distributive Services, Manufacturing, Metal, Services, Transport. To this Executive are added the four officers, namely, President, two Vice-Presidents and Secretary, who are elected by and from the Australian Congress of Trade Unions.

The objectives of the A.C.T.U. are the socialization of industry, i.e., production, distribution and exchange, and the utilization of the resources of Australia for the benefit of the people—ensuring full employment, with rising standards of living, real security and full cultural opportunities for all. The methods to be adopted are:—the closer organization of the workers by the transformation of the Australian trade union movement from the craft to an industrial basis, by grouping of unions in their respective industries and by the amalgamation of unions with a view to the establishment of one union in each industry; the consolidation of the Australian Labour Movement, with the object of unified control, administration and action; the centralized control of industrial disputes; educational propaganda among unions; and political action to secure satisfactory working-class legislation.

The A.C.T.U. was the first interstate body in Australia with authority to deal with industrial matters of an interstate character affecting the trade union movement generally. It is also the body responsible for submitting to the Commonwealth Government the names of persons suitable for selection as the Australian workers' delegate to the annual International Labour Conference.

Between the trade union and the central organization of unions may be classed certain State or district councils organized on trade lines, and composed of delegates from separate unions whose members' interests are closely connected because of their occupations. Delegate councils of bakers, bread carters and mill employees, or of unions connected directly or indirectly with the iron, steel, or brass trades, or with the building trades, may be so classed.

## § 2. International Labour Organization.

The International Labour Organization (I.L.O.) was established on 11th April, 1919, as an autonomous institution associated with the League of Nations. Its original constitution was adopted as Part XIII. of the Treaty of Versailles and formed part of other treaties of peace. During the years between its establishment and the outbreak of the 1939–45 War, the I.L.O., with headquarters at Geneva, played a leading role in promoting the improvement of labour conditions throughout the world.

*In 1940, in order to ensure that the I.L.O. should be able to continue to function freely, a working centre was established at Montreal, Canada. In 1946, the Organization became the first of the specialized agencies of the United Nations. Under the terms of agreement, the United Nations recognizes the I.L.O. as a specialized agency having responsibility in the field defined by its constitution, which embraces labour conditions, industrial relations, employment organization, social security and other aspects of social policy. The Organization has three basic parts. These are the International Labour Conference, its highest authority, which as a rule meets annually; the Governing Body, its executive council, which usually meets three times each year; and the International Labour Office, which provides the secretariat of the Organization. The Conference is composed of delegations from the Member States of the Organization. At the end of 1958, there were 79 Member States, each of which is entitled to be represented by four delegates—two Government, one representing employers and one representing workers, together with their advisers. Each delegate speaks and votes independently, so that all points of view in each country are fully expressed. The Governing Body consists of the representatives of twenty governments and ten employers' and ten workers' representatives. Of the twenty government representatives, half are from the ten countries of major industrial importance and ten are elected by the remaining governments. These latter ten government representatives and the ten employers' and ten workers' titular delegates and the deputy members of the three groups are elected by their groups at the Conference every three years. Particulars are given in *Labour Report No. 46 of the proceedings of International Labour Conferences up to the 42nd Session, held in Geneva in June, 1958.**

## H. COMPARATIVE INDEX NUMBERS.

In order to show the relative movements of certain price and related data, the following table of annual and quarterly index numbers for the six capital cities combined has been compiled with a common base 1911 = 1,000.

## COMPARATIVE INDEX NUMBERS FOR THE SIX CAPITAL CITIES COMBINED.

(Base of each Group: Weighted Average of Six Capital Cities, 1911 = 1,000 (a).)

Period.	Retail Price Index Numbers.					Nominal Wage Rates, Adult Males.	"Real" Wage Rates. (b) (d)			
	Food and Groceries. (b)	Rent (4 and 5 R'med Houses) (c)	Clothing.	Miscellaneous.	Total "C" Series Retail Price Index. (b)					
Year—										
1911 .. ..	1,000	1,000	e1,000	e1,000	e1,000	1,000	1,000			
1914 .. ..	1,144	1,082	1,140	1,140	1,140	1,081	948			
1921 .. ..	1,902	1,410	1,883	1,537	1,680	1,826	1,087			
1928 .. ..	1,761	1,743	1,507	1,537	1,675	1,963	1,172			
1932 .. ..	1,425	1,336	1,215	1,458	1,377	1,639	1,190			
1938 .. ..	1,584	1,540	1,253	1,463	1,488	1,799	1,209			
1939 .. ..	1,657	1,577	1,271	1,465	1,526	1,846	1,210			
1949 .. ..	2,492	1,605	3,019	2,037	2,349	3,210	1,367			
1950 .. ..	2,800	1,613	3,455	2,184	2,589	3,596	1,389			
1951 .. ..	3,649	1,649	4,156	2,555	3,124	4,495	1,439			
1952 .. ..	4,516	1,728	4,657	2,980	3,645	5,241	1,438			
1953 .. ..	4,723	1,861	4,872	3,126	3,820	5,539	1,450			
1954 .. ..	4,776	1,949	4,865	3,139	3,860	5,632	1,459			
1955 .. ..	5,027	2,005	4,894	3,168	3,970	5,773	1,454			
	A	B			A	B	A	B		
1956 .. ..	5,227	5,514	2,166	4,930	3,403	4,130	4,226	f6,050	1,465	1,432
1957 .. ..	5,315	5,311	2,256	5,075	3,611	4,259	4,257	f6,261	1,470	1,471
1958 .. ..	5,402	5,352	2,386	5,167	3,690	4,357	4,340	6,361	1,460	1,466
Quarter—										
1957—										
March ..	5,315	5,331	2,218	5,024	3,556	4,226	4,231	f6,193	1,465	1,464
June ..	5,322	5,359	2,245	5,070	3,605	4,256	4,268	f6,270	1,473	1,469
September ..	5,340	5,319	2,271	5,087	3,634	4,278	4,271	f6,290	1,470	1,473
December ..	5,284	5,234	2,288	5,119	3,649	4,275	4,256	f6,292	1,472	1,478
1958—										
March ..	5,385	5,343	2,308	5,129	3,652	4,316	4,301	6,290	1,457	1,462
June ..	5,396	5,332	2,379	5,176	3,653	4,348	4,326	6,366	1,464	1,472
September ..	5,395	5,329	2,414	5,179	3,688	4,364	4,341	6,391	1,464	1,472
December ..	5,431	5,404	2,444	5,184	3,768	4,401	4,391	6,396	1,453	1,457

(a) The index numbers given in the separate columns of the table cannot be compared with each other in order to show, for example, the relative cost of food and groceries and rent, since the cost in 1911 in each group or combination of groups is made equal to 1,000. (b) The index in column "A" excludes, and that in column "B" includes the price movement of potatoes and onions. See para. 5 on p. 399. (c) See footnote (c) on p. 401. (d) Index of nominal weekly wage rates for adult males divided by the "C" Series retail price index number. (e) Taken back from true base (November, 1914 = 1,000) by means of the Food and Rent (All Houses) Index. (f) Partly estimated.

## CHAPTER XIII.

## TRADE.

## § 1. Introductory.

**Constitutional Powers.**—By the Commonwealth of Australia Constitution Act, section 51 (i.), the power to make laws with respect to trade and commerce with other countries was conferred on the Commonwealth Parliament. Under section 86 of the Constitution the collection and control of duties of customs and excise passed to the Executive Government of the Commonwealth on 1st January, 1901. Other references to trade and commerce are contained in sections 87 to 95 of the Constitution (*see pp.* 18-19).

## § 2. Commonwealth Legislation affecting Oversea Trade.

1. **General.**—The principal Acts affecting overseas trade at present in force are : The Customs Act 1901–1958 ; Customs Tariff 1933–1958 ; Customs Tariff (Canadian Preference) 1931 and Customs Tariff (Canadian Preference) 1934–1958 ; Customs Tariff (Industries Preservation) Act 1921–1957 ; Customs Tariff (New Zealand Preference) 1933–1958 ; Customs Tariff (Papua and New Guinea Preference) 1936–1958 ; Customs Tariff (Federation of Rhodesia and Nyasaland Preference) 1956 ; Customs Tariff (Primage Duties) 1934–1958 ; Trading with the Enemy Act 1939–1957.

The Customs Act is the administrative Act under which the Department of Customs and Excise operates, while the Customs Tariffs provide the statutory authority for imposing the actual rates of duty operative from time to time.

2. **The Customs Tariff.**—(i) *General.* The first Commonwealth Customs Tariff was introduced by Resolution on 8th October, 1901, from which date uniform duties came into effect throughout Australia. The tariff has since been extensively amended. The Act at present in operation is the Customs Tariff 1933–1958.

The Australian Customs Tariff has been developed in conformity with the policy of protecting economic and efficient Australian industries and of granting preferential treatment to imports from certain countries of the British Commonwealth. Duties are also imposed on some goods, generally of a luxury nature, for revenue purposes. Customs collections are a major source of revenue, but in its protective character the tariff has an important influence on the Australian economy.

Australia has three classes of tariff—the British Preferential Tariff, the Intermediate Tariff and the General Tariff.

(ii) *British Preference.* British Preferential Tariff rates of duty apply to goods the produce or manufacture of the United Kingdom, provided that such goods comply with the laws and statutory regulations for the time being in force affecting the grant of preference, and that the goods have been shipped in the United Kingdom to Australia and have not been transhipped, or, if transhipped, it is proved to the satisfaction of the Collector of Customs that the intended destination of the goods, when originally shipped from the United Kingdom, was Australia. For the purpose of the preferential tariff, the following goods are deemed by section 151A of the Customs Act 1901–1957 to be the produce or manufacture of the United Kingdom, provided the final process of their production or manufacture was performed in that country :—

(a) Goods which are wholly produced or wholly manufactured in the United Kingdom from materials in one or more of the following classes—

(i) Materials wholly produced or wholly manufactured in the United Kingdom or in Australia ;

(ii) Imported unmanufactured raw materials ;

(iii) Imported manufactured raw materials as determined by the Minister.

- (b) Goods of the factory or works cost of which not less than 75 per cent. is represented—
- (i) by labour or material of the United Kingdom ; or
  - (ii) by labour or material of the United Kingdom and labour or material of Australia.
- (c) Goods of a class or kind not commercially produced or manufactured in Australia and of the factory or works cost of which not less than 25 per cent. (or 50 per cent. if the Minister so determines) is represented—
- (i) by labour or material of the United Kingdom ; or
  - (ii) by labour or material of the United Kingdom and labour or material of Australia.

With the exception of a relatively small number of commodities which carry special rates of duty, the British Preferential Tariff has also been extended, as a result of separate trade agreements, to Canada and New Zealand and by tariff legislation to the Territory of Papua and New Guinea, and the abovementioned preference conditions apply *mutatis mutandis* to each of those countries, except that in respect of New Zealand the percentage content of goods under clause (b) of the said conditions is 50 per cent. of New Zealand and Australian labour and materials or 75 per cent. of New Zealand and United Kingdom or of New Zealand, Australian and United Kingdom labour and materials. In relation to specified goods, the British Preferential Tariff also applies to Ceylon, Ghana, the Federation of Malaya, and most of the British non-self-governing colonies, protectorates and trust territories.

(iii) *Intermediate Tariff.* The Intermediate Tariff has been a feature of the Australian Tariff for a considerable number of years, although its effective application dates only from 1st January, 1937, consequent upon the conclusion of trade agreements with Belgium, Czechoslovakia and France in 1936. The countries to which the Intermediate Tariff applies include those countries with which Australia has concluded trade agreements (including tariff negotiations pursuant to the *General Agreement on Tariffs and Trade*) and countries which accord Australia reciprocal most-favoured-nation tariff treatment by reason of agreements between those countries and the United Kingdom. The Intermediate Tariff has also been extended to some countries to which Australia has no formal obligation to accord most-favoured-nation treatment. The countries and the particular tariff items to which the Intermediate Tariff applies are specified by Customs Proclamation.

(iv) *General Tariff.* The General Tariff applies to goods other than those to which the British Preferential Tariff or Intermediate Tariff or special rates under trade agreements apply.

3. **Primage Duties.**—In addition to the duties imposed by the Customs Tariff, *ad valorem* primage duties at rates of 4 per cent., 5 per cent. or 10 per cent. are charged on some goods according to the type of goods and origin thereof under the Customs Tariff (Primage Duties) 1934–1958. Other goods are exempt from primage duty. Goods the produce or manufacture of New Zealand, Norfolk Island, Fiji and the Territory of Papua and New Guinea are exempt from primage duty.

4. **Tariff Board.**—The Tariff Board Act 1921–1958 provides for the appointment of a Tariff Board consisting of seven members, two, but not more than three, of whom shall be officers of the Commonwealth Public Service. (For the period from 21st May, 1958 to 31st December, 1958, provision was made for the Tariff Board to consist of eight members). Members of the Board are appointed for terms of not less than one year and not more than five years. The purpose of the Tariff Board is to advise the Government on matters relating to trade and the Customs and Excise Tariffs.

The Chairman of the Board has the duty to ensure the efficient and orderly conduct of the business of the Board. Provision is made for the appointment of a Deputy Chairman to whom the Chairman may delegate his powers, duties and functions under the Act.

The more important matters which the Minister of State for Trade shall refer to the Board for inquiry and report include:—any proposal for the application of the British Preferential Tariff or the Intermediate Tariff to any part of the British Commonwealth or any foreign country; the necessity for new, increased, or reduced duties; the necessity for granting bounties and the effect of existing bounties; and any complaint that a manufacturer is taking undue advantage of the protection afforded him by the Tariff by charging unnecessarily high prices for his goods or acting in restraint of trade. In addition the Minister may refer the following matters to the Tariff Board for inquiry and report:—the general effect of the working of the Customs Tariff and the Excise Tariff; the fiscal and industrial

effects of the Customs laws on the Commonwealth ; the incidence between the rates of duty on raw materials and or finished or partly finished products; and other matters affecting the encouragement of primary and secondary industries in relation to the Tariff. The Minister of State for Customs and Excise may refer to the Tariff Board for inquiry and report, the following matters:—the classification of goods in the Customs Tariff or Excise Tariff and any matter in connexion with the interpretation of these Tariffs; the question of the value for duty of goods; whether goods not prescribed in departmental by-laws should be so prescribed; and any matter in respect of which action may be taken under the Customs Tariff (Industries Preservation) Act 1921–1957 only after inquiry and report by the board.

Inquiries conducted by the Board relating to any revision of the Tariff, any proposal for a bounty, or any complaint that a manufacturer is taking undue advantage of the protection afforded him by the Tariff shall be held in public, and evidence in such inquiries shall be taken in public on oath, unless any witness objects to giving any evidence in public which the Board is satisfied is of a confidential nature, when the Board may take such evidence in private. Evidence taken by the Board in connexion with any inquiry under the Customs Tariff (Industries Preservation) Act 1921–1957 shall be taken in public on oath.

**5. Industries Preservation.**—The Customs Tariff (Industries Preservation) Act 1921–1957 provides that, after inquiry and report by the Tariff Board, special duties shall be collected in the following cases when the importation of the goods referred to might be detrimental to an Australian industry. In the case of goods sold for export to Australia at a price less than the fair market value for home consumption or at a price which is less than a reasonable price, a special dumping duty shall be collected equal to the difference between the price at which the goods were sold and the fair market value, or the difference between the price at which the goods were sold and a reasonable price. Similar provision is made for goods consigned to Australia for sale. With regard to goods exported to Australia at rates of freight less than the normal rate of freight the dumping freight duty shall be an amount equal to the difference between the freight paid and the freight which would have been payable at the normal rate. In respect of goods exported to Australia upon which a subsidy, bounty or other financial assistance is paid or given directly or indirectly upon the production, manufacture, carriage or export of those goods, a countervailing duty shall be collected equal to the amount of the subsidy, bounty or other financial assistance; and in the case of any other goods—an amount equal to the difference between the freight paid and the freight which would have been payable at the normal rate.

Special duties may also be collected if dumped or subsidized goods are imported to the detriment of the trade in the Australian market of a third country.

The Act also provides for the collection of an emergency duty on goods which enter Australia under conditions which cause or threaten serious injury to Australian industries or to industries in a third country whose exports enter Australia under preferential tariff. The amount of emergency duty payable is the equivalent of the difference between the landed duty-paid cost of the goods and a reasonably competitive landed duty-paid cost.

The Act provides that the Minister for Customs and Excise may publish a notice in the *Gazette* specifying the goods upon which the special emergency duties under this Act shall thereupon be charged and collected.

**6. Trade Descriptions.**—The Commerce (Trade Descriptions) Act 1905–1950 gives power to require the application of a proper trade description on certain prescribed goods imported into or exported from the Commonwealth. Goods which must bear a prescribed trade description upon importation into Australia are specified in the Commerce (Imports) Regulations. As regards exports from Australia, marking requirements are prescribed in regulations issued under the Act and relating to specified export commodities.

**7. Import Controls.**—(i) *Customs (Import Licensing) Regulations.* The Customs (Import Licensing) Regulations were first promulgated in December, 1939, and were made pursuant to section 50 of the Customs Act. New regulations embodying minor changes were implemented on 14th December, 1956. The regulations provide, *inter alia*, that the importation into the Commonwealth of any goods (not excepted from the application of the regulations) is prohibited unless—(a) a licence under these regulations to import the goods is in force and (b) the conditions and restrictions (if any) to which the licence is subject are complied with.

The regulations were at first applied only to imports from non-sterling sources, with the object of conserving non-sterling exchange and enabling priority in shipping space to be given to essential imports. However, with a subsequent decline in Australia's sterling balances in London and changes in the general war situation the restrictions were extended in December, 1941 to cover a wide range of imports from sterling countries. The position remained basically the same during the remainder of the war and in the immediate post-war period.

As Australia's external financial position improved, the restrictions were progressively relaxed until, by November, 1950, imports from most countries had been exempted from the application of the regulations and, with minor exceptions, the restrictions applied only to imports from the dollar area and Japan. This position obtained until March, 1952.

During 1951-52, following a fall in the price of wool and a large increase in the volume of imports (the product, in turn, of the wool boom of 1950-51), Australia incurred a substantial deficit on current account. Oversea reserves fell rapidly in the latter part of 1951 and early 1952, endangering Australia's external financial position to such a degree that it became necessary on 8th March, 1952 to apply the Customs (Import Licensing) Regulations to imports from all sources, with the exception of goods originating in Papua, New Guinea and Norfolk Island. By March, 1953, Australia's balance of payments had shown sufficient improvement to justify a general relaxation in the quantitative restrictions applying to goods from sources other than the dollar area and Japan, and as a consequence progressive relaxations were made operative during 1953 and the first half of 1954. The balance of payments position deteriorated rapidly from June, 1954 and, as a result, import licensing restrictions were intensified during the second half of 1954 and throughout 1955, but the decline in overseas funds continued. New and more stringent measures were therefore introduced, operative from 1st July, 1956, involving considerable variations in import licensing and aimed at creating a balance between receipts and payments in foreign currency.

Australia's trade position improved considerably during the second half of 1956 and import restrictions were progressively relaxed throughout 1957. Important changes included the provision of additional funds for the correction of licensing anomalies and the licensing of a number of items (56) on an import replacement basis. The latter system of licensing, which was applied to a wide range of commodities as from 1st August, 1957, in effect permits importation up to the level of requirements for the items concerned.

Since August, 1957, a number of administrative changes have been introduced, designed in the main, to reduce discrimination against the dollar area and to facilitate the administration of import controls. These included the placing of certain additional raw materials, capital equipment and machinery on the "World" system of licensing and the exemption of petroleum, certain basic metals and raw materials from the application of controls. For these items there is now no restriction as to source of supply while for "exempt" goods importation may be effected without having to obtain an import licence. During 1958, some funds were also provided for the purpose of permitting overseas countries to conduct Trade Fairs and Retail Stores Displays in Australia, with the object of assisting their export trade.

Prior to 22nd November, 1954, goods of Japanese origin were licensed on a basis quite separate from that of other non-dollar licensing. From that date until 7th July, 1957, goods of Japanese origin were, with certain exceptions, licensed for importation on the same basis as like goods originating in other non-dollar countries. Since then there has been no distinction between Japan and other non-dollar countries as regards import licensing.

Restrictions on imports from the dollar area have been maintained in varying degrees since their imposition in December, 1939 and, in general, the issue of licences for the importation of goods from the dollar area is mainly restricted to goods of a high degree of essentiality, unavailable in adequate quantities from other countries. The goods imported from the dollar area are mainly capital goods, raw materials, semi-manufactures and other producer goods. All applications for licences are treated on the merits of each individual case.

(ii) *Customs (Prohibited Imports) Regulations.* In addition to the Import Licensing Regulations which are imposed for balance of payments reasons, section 50 of the Customs Act provides that the Governor-General may, by regulation, prohibit the importation of goods into Australia. Prohibition by regulation may be exercised by—(a) prohibiting the importation of goods completely; (b) prohibiting the importation of goods from a specified place; (c) prohibiting the importation of goods unless specified conditions or restrictions are complied with. Lists of products subject to prohibition are set out in the Customs (Prohibited Imports) Regulations. Commodities the importation of which has been prohibited under the regulations include dangerous drugs, firearms, undesirable publications and articles deleterious to public health.

8. *Export Control.*—(i) *Commodity Control.* Section 112 of the Customs Act provides that the Governor-General may, by regulation, prohibit the exportation of goods from Australia and that this power may be exercised by—(a) prohibiting the exportation of goods absolutely; (b) prohibiting the exportation of goods to a specified place; and (c) prohibiting the exportation of goods unless prescribed conditions or restrictions are complied with. Goods subject to this export control are listed in the Customs (Prohibited Exports) Regulations.

(ii) *Monetary Control—Banking Act 1945-1953.* As an integral part of the framework of exchange control, a control over goods exported from Australia is maintained under the provisions of Part III. of the Banking (Foreign Exchange) Regulations, to ensure that the

full proceeds of such goods are received into the Australian banking system and that these proceeds are received in the currency and in the manner prescribed by the Commonwealth Bank of Australia. This action is complementary to that taken under other parts of the Banking (Foreign Exchange) Regulations to control the movement out of Australia of capital in the form of securities, gold and currency.

Provision is made in the regulations for the grant of export licences subject to such terms and conditions as are imposed. On the receipt in Australia by the Commonwealth Bank, or by a bank acting as agent for that Bank, of advice that the foreign currency has been paid to the Commonwealth Bank or to an agent of the Bank in payment for goods exported in accordance with a licence granted under the regulations, the Bank, or an agent of the Bank, pays the licensee, or such other person as is entitled to receive it, an amount in Australian currency equivalent to the foreign currency received. In addition to commercial transactions, exports by private individuals are controlled. Persons leaving Australia for overseas are required to obtain licences to cover their bona fide baggage, personal effects and household effects in any individual case where the gold content thereof exceeds £A50, or where jewellery and other articles of high intrinsic worth either exceed £A1,000 in value or have not been the personal property of the passenger for at least twelve months.

9. *Trade Agreements.*—(i) *The United Kingdom.* The original United Kingdom and Australia Trade Agreement (Ottawa Agreement) was signed on 20th August, 1932. Under this agreement, Australia secured preferences in the United Kingdom market for a wide range of Australian export commodities and in return incurred obligations in respect of tariff levels and the grant of preference to United Kingdom goods.

A new Trade Agreement, designed to replace the original agreement and correct the unbalance in benefits which had emerged in the 25 years of its operation, was signed in Canberra on 26th February, 1957. Briefly, the new agreement preserved security for Australian exports in the United Kingdom market, but lowered the obligatory margins of preference which Australia extends to the United Kingdom.

(ii) *Canada.* The existing trade agreement between Canada and Australia came into force on 3rd August, 1931. The basis of the agreement is, generally, the mutual accord of British Preferential Tariff treatment. The exceptions to this general rule are specified in the schedules to the agreement.

The Customs Tariff (Canadian Preference) 1931 and the Customs Tariff (Canadian Preference) 1934–1958 give effect to the agreement so far as Australia is concerned.

(iii) *New Zealand.* The existing trade agreement between Australia and New Zealand came into force on 1st December, 1933. The basis of the agreement is, generally, the mutual accord of British Preferential Tariff treatment. The exceptions to this general rule are listed in the schedules to the agreement.

The Customs Tariff (New Zealand Preference) 1933–1958 gives legislative effect to the provisions of the agreement.

(iv) *Federation of Rhodesia and Nyasaland.* During June, 1955, a trade agreement was negotiated with the Federation. Australia's principal undertaking was to grant an exclusive tariff preference to the Federation on unmanufactured tobacco, a concession formerly accorded only to Southern Rhodesia, under a trade agreement now terminated. The Federation accorded preferential tariff treatment on a wide range of Australian export products, including wheat and powdered and condensed milk.

(v) *Federation of Malaya.* A trade agreement with the Federation was signed on 26th August, 1958 and came into force immediately. The agreement gives an assurance that Australia's traditional flour trade will be protected from subsidised or dumped competition. An undertaking is given that any tariff preferences Malaya accords will be extended also to Australia. Australia guaranteed free entry for natural rubber so long as the Papua-New Guinea crop is absorbed and assured the Federation that natural rubber would not be at a disadvantage compared with synthetic rubber in respect of tariff or import licensing treatment.

(vi) *Japan.* An Agreement on Commerce between the Commonwealth of Australia and Japan was signed on 6th July, 1957, in Japan. Formal ratification took place in Canberra on 4th December, 1957, following approval of the agreement by the Commonwealth Parliament and the Japanese Diet. The agreement will remain in force until 5th July, 1960 and thereafter unless prior notice of termination is given by either Government.

The agreement provides that each country shall extend most-favoured-nation treatment to the other in respect of customs duties and similar charges and import and export licensing. Japan will not be entitled to claim the benefit of preferences accorded by Australia to Commonwealth countries and dependent territories.

All Japanese goods are now entitled to the most-favoured-nation rate of duty on importation into Australia, whereas previously the general rate applied. The reductions involved have not been significant. Japan has also been placed on an equal basis with other non-dollar countries under the import licensing system. Prior to the agreement certain goods, when of Japanese origin, could be imported only within specified limits

Australia received certain specific undertakings. Japan agreed:—

- (a) To accord Australian wool the opportunity of competing in the global quota for wool for not less than 90 per cent. of the total foreign exchange allocation for wool each year and not to restrict the total foreign exchange allocation for wool beyond the extent necessary to safeguard Japan's external financial position and balance of payments;
- (b) to take no action to vary the present level of duty on wool imports from Australia for a period of three years from date of signature;
- (c) to admit Australian wheat and barley on a competitive and non-discriminatory basis;
- (d) to accord Australian sugar the opportunity of competing for not less than 40 per cent. of the total foreign exchange allocation for sugar;
- (e) to include Australia as a permitted source of supply for beef tallow and cattle hides on the Automatic Approval (licensing) list;
- (f) to admit Australian dried skim milk on a competitive and non-discriminatory basis;
- (g) to make reasonable provision for the import of Australian dried vine fruits (raisins, currants and sultanas) in each year of the three-year period.

It was agreed that before the end of the initial three-year period of the agreement the two Governments would explore the possibility of applying the General Agreement on Tariffs and Trade between the two countries.

Provision exists for either country to suspend obligations under the agreement to the extent and for such time as may be necessary to prevent serious injury to domestic producers as a result of imports of like or directly competitive products from the other country. The Australian Government has appointed an Advisory Authority whose function is to advise the Minister for Trade whether Australian industry is threatened with serious damage as a result of the agreement.

(vii) *Other Countries.* Australia has entered into bilateral trade agreements with the Union of South Africa, Belgium, Brazil, Czechoslovakia, France, Greece and Switzerland. Summaries of the texts of these agreements were given in earlier issues of the Official Year Book. In 1951, Australia entered into a trade agreement with Israel under which each country undertook to accord most-favoured-nation tariff treatment to imports from the other. A similar agreement with Iceland was concluded in 1952.

(viii) *The General Agreement on Tariffs and Trade (G.A.T.T.).* The General Agreement on Tariffs and Trade is an international trade agreement which has been in operation since 1st January, 1948. Australia was an original signatory of the Protocol of Provisional Application, by which Parts I. and III. of the Agreement are being provisionally applied, Part II. is being applied to the fullest extent not inconsistent with existing legislation at the date of signature of the Protocol.

In December, 1958 there were 37 contracting parties to the Agreement, comprising most of the world's larger trading nations.

Many of the Articles in Part II. of the General Agreement are similar to articles which were included in the Havana Charter for an International Trade Organization. Had the Charter come into force, Part II. of the General Agreement, containing general commercial policy provisions to prevent the circumvention of tariff concessions by other measures, would have been suspended.

Four series of tariff negotiations have been conducted under the provisions of the General Agreement. As a result of these negotiations, Australia has obtained tariff concessions on almost all the principal products of which she is an actual or potential exporter to the individual countries concerned. These concessions were a result both of direct negotiation by Australia and of negotiation by other countries—in the latter case, the benefits occur through the operation under the Agreement of the most-favoured-nation principle.

The contracting parties periodically hold plenary sessions to deal with questions arising out of the administration of the Agreement. The thirteenth session was held at Geneva in October and November, 1958.

### § 3. Imperial Preference in the United Kingdom.

1. *Preferential Tariff of the United Kingdom.*—A brief summary of the preferential tariff of the United Kingdom in the years prior to 1931 was published in previous issues of the Official Year Book.

By 1931, the United Kingdom imposed duties on a fairly wide range of goods, provision being made in all cases for preferential treatment to Empire goods. The important preferences for Australia were those on sugar, dried fruit, wine, and jams and jellies. Even at this time, however, the United Kingdom adhered to the principles of free trade and by far the greater part of imports was free of duty.

In order to counteract the flood of dumping which followed the collapse of world trade in 1929–30, the United Kingdom introduced emergency tariff legislation in 1931. *Ad valorem* duties were imposed on almost all goods imported into the United Kingdom with the exception of certain raw materials, goods from Empire countries being exempt from these duties. These temporary measures were embodied in the Import Duties Act of March, 1932, by the enactment of which the United Kingdom finally abandoned free trade as a policy. This Act provided for the free entry for Empire goods pending the conclusion of some permanent agreement. The Ottawa Agreements Act of November, 1932 emerged from the Imperial Economic Conference held in Ottawa and embodied agreements concluded between the United Kingdom and the Dominions, Newfoundland and Southern Rhodesia. For the purpose of considering the present preferences enjoyed by Australia in the United Kingdom, it is expedient to regard the Import Duties Act and the Ottawa Agreements Act as complementary.

The Import Duties Act provided for the imposition of a general *ad valorem* duty of 10 per cent. on all imports with certain exceptions (i.e., those on the Free List and those already dutiable under previous enactments). Additional duties could be imposed and items on the Free List subjected to duty, and in fact the range of items subject to duties under this Act has been extended from time to time since its enactment.

The freedom of Empire goods from these duties was guaranteed under the Ottawa Agreements Act, which also provided for the imposition of new duties on imports from foreign, but not Empire, countries of a number of products of special interest to the Empire countries concerned. Whilst free entry was guaranteed to Empire producers on a wide range of products, the margins of preference thereby applicable were not bound, and the duties could be varied up or down by the United Kingdom Government without the consent of Empire countries. On a selected range of items, however, which are specified in the schedules to the Ottawa Agreements Act, the duties could not be varied by the United Kingdom without the consent of the other party to the respective agreement.

Since 30th October, 1947, Canada and the United Kingdom have, by an exchange of letters, recognized the rights of their respective Governments to reduce or eliminate the preferences they accord one another without prior consultation or consent.

In 1947 the United Kingdom and Australia adhered to the General Agreement on Tariffs and Trade, which prohibits increases in tariff preferences by either country. This rule, as is the case with the other provisions of the General Agreement, may be waived by a two-thirds majority of the signatories to the agreement.

**2. The Australia-United Kingdom Trade Agreement.**—The provisions and history of the original Australia-United Kingdom Agreement (Ottawa Agreement) were published in previous issues of the Official Year Book.

The major provisions of the current agreement (signed in Canberra on 26th February, 1957) which affect Australia's position in the United Kingdom market are as follows:—

- (a) Continued free entry for those Australian goods in which Australia has an active trade interest, and which were accorded free entry immediately prior to the new agreement.
- (b) A guaranteed minimum margin of preference in the United Kingdom Tariff on all items so treated in the previous agreement plus an extension of this guarantee to several items on which the margin of preference, although in force, was not bound to Australia. This latter group comprised currants, egg powder and egg pulp, jam, rice, tomato juice, pineapple juice and coconut oil. A selection of the items on which Australia receives a bound margin of preference and the extent of that preference is as follows (all values in sterling):—Butter (15s. a cwt.); cheese (15 per cent. *ad val.*); canned peaches, pears and apricots (12 per cent. *ad val.*); raisins (8s. 6d. a cwt.); eggs in shells (1s. to 1s. 9d. a great hundred (10 dozen)); milk powder (6s. a cwt.); sweetened condensed milk (5s. a cwt.); apples (4s. 6d. a cwt. in season); honey (5s. a cwt.); flour (10 per cent. *ad val.*); light wine (2s. a gallon); heavy wine (10s. a gallon at present duty rate).
- (c) All rights under the Ottawa Agreement in respect of meat are maintained.
- (d) Australia receives an assured wheat market of at least 750,000 tons f.a.q. wheat or flour equivalent annually. Any Australian high-protein wheat sold to the United Kingdom is not counted against this obligation.

- (e) There is provision for full consultation between the two Governments on such matters as agricultural production and marketing, transport and communication, the disposal of surpluses and restrictive business practices.
- (f) The two Governments declared their intention to introduce legislation which will enable them to enforce anti-dumping or countervailing duties where material injury is caused or threatened to the other party.
- (g) The agreement shall be the subject of re-negotiation between the two Governments in 1961.

3. Recent Developments affecting the Operation of the Trade Agreement.—The effect of increases in commodity prices in the post-war period has been to reduce the effective value of those preference margins which are expressed in terms of British currency ("specific margins"). The commodities affected are butter, eggs, canned apples, loganberries, pineapples, tropical fruit salad, raisins, dried apricots, sugar, lactose, and wines. The following table shows, for selected items, how the *ad valorem* incidence of specific preference margins originally negotiated in 1932 and rebound in the 1957 agreement has been reduced by increases in the average value of the commodities on which they are granted.

#### IMPERIAL PREFERENCE: CHANGES IN VALUE OF PREFERENCES.

*Ad Valorem Incidence of Specific Preferences Received by Australia in the United Kingdom.*

Commodity.	Preference Margin.	<i>Ad Valorem Incidence. (a) (Per cent.)</i>			
		1938.	1947.	1954.	1956.
Sugar, raw .. ..	£3 14s. 8d. a ton..	35.8	12.2	9.4	8.7
Butter .. ..	15s. a cwt. ..	13.3	7.6	4.3	4.6
Beef (frozen) .. ..	¾d. a lb. ..	17.3	10.3	4.3	3.6
Canned pineapple .. ..	5s. a cwt. ..	21.4	5.5	2.9	3.5
Currants .. ..	2s. a cwt. ..	7.2	2.8	2.4	1.8
Raisins .. ..	10s. 6d. a cwt. to 1947; 8s. 6d. a cwt. from 1948	31.2	13.1	9.7	8.0
Honey .. ..	7s. a cwt. to 1938; 5s. a cwt. from 1939	19.0	6.8	5.4	3.8
Milk, dried whole .. ..	6s. a cwt. ..	8.7	4.7	2.9	3.1
Milk, dried skim .. ..	6s. a cwt. ..	20.1	7.4	7.0	7.3
Apples .. ..	4s. 6d. a cwt. ..	26.4	9.9	5.9	5.4
Pears .. ..	4s. 6d. a cwt. ..	19.5	6.7	5.3	4.9

(a) The *ad valorem* incidence of a preference is calculated by expressing the specific margin of preference (in £ sterling a cwt., a ton, etc.) on a particular commodity as a percentage of the average unit value (in £ sterling a cwt., a ton, etc.) of United Kingdom imports of that commodity from all sources in the year concerned.

#### § 4. Trade Commissioner Service.

In the interest of building and maintaining a high level of trade, Governments nowadays generally appoint commercial representatives in their main export markets, their duties including the collection of information about trade conditions, assisting exporters in their difficulties and promotion of trade generally.

Prior to 1929, Australian representation abroad was limited to the High Commissioner's Office in London, with a subsidiary agent in Paris, and the Office of the Commissioner-General for Australia in New York. Apart from the facilities afforded by those offices, the only form of overseas trade representation available to Australia was that of the United Kingdom Department of Overseas Trade, whose activities were naturally concerned with the development of United Kingdom rather than Dominion trade.

The growing importance of Australia's trade with Canada led to the appointment in 1929 of an Australian Trade Commissioner in that country. The part played by that official in the subsequent negotiations of the Trade Agreement with Canada, in the cultivation of close and cordial relations with the Canadian authorities, and in general in focusing interest on Australia and Australian products, amply demonstrated the value of such appointments to both the Commonwealth Government and the Australian trading community.

The Trade Commissioners Act 1933 provided for the establishment of an Australian Government Trade Commissioner Service and by the beginning of the 1939-45 War posts had been established at Wellington, Batavia (now Djakarta), Shanghai, Tokyo, Cairo, Bombay, New York and Calcutta. The Trade Commissioner Service was further expanded in 1946 and in February, 1959 there were 28 Trade Commissioner posts in 21 countries.

The general advantages to be derived from the appointment of Trade Commissioners may be briefly stated as follows:—(a) fostering of goodwill, (b) correction and avoidance of misunderstandings, and (c) dissemination of knowledge concerning the respective countries. Particular facilities which they are able to afford to the trading community are (a) information as to present and prospective demand for goods, (b) information as to foreign and local competition, (c) advice as to best selling methods, (d) reports as to the standing of foreign buyers, (e) specification of articles in demand, (f) dealing with trade inquiries, (g) advice and assistance to commercial visitors regarding trade matters, (h) settlement of difficulties between exporters in Australia and buyers abroad, and (i) information as to foreign import requirements, customs duties, trade regulations, etc.

In addition to the foregoing trade functions, it is the duty of a Trade Commissioner to watch and advise the Government of any developments in his territory (which may include several countries) likely to affect trade and commerce with Australia, and other matters of economic interest to the home Government. He may be called upon to represent his Government at overseas conferences, and in certain countries where there is no diplomatic or consular mission (e.g., the Federation of the West Indies, Hong Kong, the Federation of Rhodesia and Nyasaland and Sweden), he is called upon to act as the Australian representative on official occasions.

Trade Commissioners usually enter the Service from either the commercial world or the Public Service, and applications for entry into the Service are called for periodically by public advertisement. In the more important posts it is the practice for the Trade Commissioner to share his duties with an Assistant Trade Commissioner, who is selected to be trained in the Service and qualify at a later stage for appointment as a Trade Commissioner. These staffing arrangements are designed to enable the Government to draw upon experienced and able executives in both private enterprise and the Public Service, and at the same time to build up a body of competent personnel to carry out a policy of vigorous expansion in the field of oversea trade.

The Trade Commissioner Service is administered by the Commonwealth Department of Trade (as distinct from the diplomatic and consular services, administered by the Department of External Affairs), but in countries where there is an Australian diplomatic or consular mission it is the practice for Trade Commissioners to be attached to the mission and to hold an appropriate diplomatic or consular rank (Commercial Counsellor, Commercial Secretary or Commercial Attaché).

In 1957 Australia's official commercial representation overseas was extended by the introduction of a system of Government Trade Correspondents. These men, who as a rule already reside in particular centres overseas, are engaged on a part time basis to carry out market research, arrange introductions between buyer and seller, and generally promote Australia's trade interests in the same way as Trade Commissioners. Each Trade Correspondent operates under the general direction of the nearest Trade Commissioner and acts as a point of local contact for him.

The first two Australian Trade Correspondents were appointed in 1957 at Montevideo (Uruguay) and Nairobi (Kenya). In 1958 four more were appointed at Nadi (Fiji), Honolulu, Mauritius and Mexico City.

The oversea trade representation is shown in Chapter XXX.—Miscellaneous.

## § 5. Method of Recording Imports and Exports.

1. **Source of Statistics.**—Oversea trade statistics are compiled from documents obtained under the Customs Act 1901-1958 and supplied to this Bureau by the Department of Customs and Excise.

2. **Customs Area.**—The Customs Area, to which all oversea trade statistics issued by this Bureau apply, is the whole area of the Commonwealth of Australia. Non-contiguous territories are treated as outside countries, and trade transactions between Australia and these non-contiguous territories are part of the oversea trade of Australia. Such transactions are shown separately, i.e., the trade of Australia with each particular country is separately recorded and tabulated.

3. **The Trade System.**—There are two generally accepted systems of recording oversea trade statistics, namely, (a) special trade and (b) general trade, and statistics of both are published by the Bureau, although greater emphasis is placed on general trade. The Statistical Office of the United Nations defines the two systems as follows:—

(a) *Special Trade.* Special imports are the combined total of imports directly for domestic consumption and withdrawals from bonded warehouses or free zones for domestic consumption, transformation or repair. Special

exports comprise exports of national merchandise, namely, goods wholly or partly produced or manufactured in the country, together with exports of nationalized goods. (Nationalized goods are goods which, having been included in special imports, are then exported.)

- (b) *General Trade.* General imports are the combined total of imports directly for domestic consumption and imports into bonded warehouse or free zone. Direct transit trade and trans-shipment under bond are excluded. General exports are the combined total of national exports and re-exports of imported merchandise including withdrawals from bonded warehouse or free zone for re-export.

The tables which follow refer to general trade, except for those appearing in § 16, para. 2, which refer to imports cleared for home consumption.

4. *Statistical Classification of Imports and Exports.*—Statistics of overseas imports and exports from which the summary tables in this issue of the Official Year Book have been extracted were compiled according to the revised classification which came into operation on 1st July, 1945. This classification is designed to allow for the inclusion of items which become significant with varying trade conditions, and in 1957–58 provided for over 2,000 import items and over 1,000 export items.

5. *The Trade Year.*—From 1st July, 1914, the statistics relating to overseas trade have been shown according to the financial year (July to June). Prior to that date the figures related to the calendar year. A table is included in § 17 showing the total value of imports and exports in the calendar years 1954 to 1958 inclusive.

6. *Valuation.*—(i) *Imports.* The recorded value of goods imported from countries beyond Australia as shown in the following tables represents the amount on which duty is payable or would be payable if the duty were charged *ad valorem*. Since 15th November, 1947, the value for duty of goods imported into Australia has been the f.o.b. value in Australian currency instead of the British currency f.o.b. value plus 10 per cent.

Section 154 (1) of the Customs Act 1901–1958 provides that “when any duty is imposed according to value, the value for duty shall be the sum of the following :—

- (a) (i) the actual money price paid or to be paid for the goods by the Australian importer plus any special deduction, or  
 (ii) the current domestic value of the goods, whichever is the higher ; and  
 (b) all charges payable or ordinarily payable for placing the goods free on board at the port of export”.

“Current domestic value” is defined as “the amount for which the seller of the goods to the purchaser in Australia is selling or would be prepared to sell for cash, at the date of exportation of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country”. All import values shown throughout this and other chapters of this issue of the Official Year Book are therefore uniform f.o.b. values at port of shipment in Australian currency.

(ii) *Exports.* Since 1st July, 1937, the following revised definitions of f.o.b. values have been adopted for exports generally :—

- (a) Goods sold to overseas buyers before export—the f.o.b. port of shipment equivalent of the price at which the goods were sold (e.g., as regards wool, the actual price paid by the overseas buyer plus the cost of all services incurred by him in placing the wool on board ship).  
 (b) Goods shipped on consignment—the Australian f.o.b. port of shipment equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which the goods were dispatched for sale (as regards wool, the f.o.b. port of shipment equivalent of the current price ruling in Australia will normally provide a sufficient approximation to the f.o.b. port of shipment equivalent of the price ultimately received).

Exporters are required to show all values in terms of Australian currency, and to include the cost of containers.

An account of the bases of valuation in operation prior to 1st July, 1937 was given on page 469 of Official Year Book No. 39.

7. *Inclusions and Exclusions.*—(i) *Ships' and Aircraft Stores.* Prior to 1906, goods shipped in Australian ports on oversea vessels as ships' stores were included as exports. From 1906, ships' and aircraft stores have been specially recorded as such, and omitted from the tabulation of exports. A table showing the value of these stores shipped each year since 1953–54 is shown on page 486.

(ii) *Outside Packages.* Outside packages (containers, crates, etc.) have always been included as a separate item in the tabulation of imports but, except for those received from the United Kingdom, a classification according to country of origin has been available only since 1950–51. For exports, however, the value recorded for each item includes the value of the outside package.

(iii) *Trade on Government Account.* Imports and exports on Government account are treated as normal transactions and are an integral part of oversea trade transactions.

(iv) *Currency.* Notes and coins of base metal are included in the oversea trade statistics at their commodity value only.

(v) *Gold Content of Ores and Concentrates.* The value of ores and concentrates imported and exported includes the value of the gold content. The latter is not recorded separately for purposes of inclusion in imports and exports of gold.

(vi) *Personal Effects.* Migrants' effects are included in imports and exports.

8. *Countries to which Trade is Credited.*—(i) *Imports.* From 1st January, 1905, in addition to the record of the countries whence goods arrived directly in Australia, a record of the countries of their origin was kept, as it was considered that classification of imports according to country of origin was of greater interest and value than classification according to country of shipment. Up to and including the year 1920–21, imports continued to be classified both according to country of shipment and according to country of origin, but the former tabulation was discontinued as from the year 1921–22.

(ii) *Exports.* In the export sections of tables in this chapter, "country" refers to country of consignment.

9. *Pre-Federation Records.*—In the years preceding Federation, each State independently recorded its trade, and in so doing did not distinguish other Australian States from foreign countries. As the aggregation of the records of the several States is necessarily the only available means of ascertaining the trade of Australia for comparison with later years, it is unfortunate that past records of values and the direction of imports and exports were not on uniform lines. Imports and exports for years prior to Federation may be found in issues of the Official Year Book prior to No. 41. On the introduction of the Customs Act 1901 the methods of recording values were made uniform throughout the States.

## § 6. Total Oversea Trade.

1. *Including Gold.*—The following table shows the total trade (including gold) of Australia with oversea countries from 1901 to 1957–58. To save space, the period 1901 to 1950–51 has been divided into five-year periods, and the figures shown represent the annual averages for the periods specified. Figures for the individual years were published in Official Year Book No. 40 and earlier issues, but it should be borne in mind that the figures for imports in issues prior to No. 37 were in British currency.

In this chapter the values in all tables of imports and exports are shown in Australian currency f.o.b. at port of shipment.

## OVERSEA TRADE : AUSTRALIA.

(INCLUDING GOLD.)

Period.(a)	Value.(£'000.)			Excess of Exports(+) or Imports(-) (£'000.)	Value per Head of Population.(£)		
	Imports.	Exports.	Total.		Imports.	Exports.	Total.
1901 to 1905 ..	35,689	51,237	86,926	+ 15,548	9.1	13.1	22.2
1906 to 1910 ..	46,825	(b) 69,336	116,161	+ 22,511	11.0	16.3	27.3
1911 to 1915-16 ..	66,737	74,504	141,241	+ 7,767	13.8	15.4	29.2
1916-17 to 1920-21	91,577	115,066	206,643	+ 23,489	17.4	21.9	39.3
1921-22 to 1925-26	124,404	134,545	258,949	+ 10,141	21.1	22.9	44.0
1926-27 to 1930-31	119,337	131,382	250,719	+ 12,045	18.6	20.5	39.1
1931-32 to 1935-36	73,798	120,958	194,756	+ 47,160	11.1	18.1	29.2
1936-37 to 1940-41	123,553	157,610	281,163	+ 34,057	17.8	22.7	40.5
1941-42 to 1945-46	211,514	163,955	375,469	- 47,559	29.1	22.4	51.5
1946-47 to 1950-51	449,273	571,430	1,020,703	+ 122,157	57.2	72.7	129.9
1951-52.. ..	1,053,423	675,008	1,728,431	- 378,415	123.5	79.1	202.6
1952-53.. ..	514,109	871,272	1,385,381	+ 357,163	58.9	99.7	158.6
1953-54.. ..	681,609	828,332	1,509,941	+ 146,723	76.6	93.0	169.6
1954-55.. ..	843,742	774,164	1,617,906	- 69,578	92.8	85.2	178.0
1955-56.. ..	821,088	781,864	1,602,952	- 39,224	88.1	83.9	172.0
1956-57.. ..	718,991	992,906	1,711,897	+ 273,915	75.4	104.1	179.5
1957-58.. ..	791,940	819,151	1,611,091	+ 27,211	81.3	84.0	165.3

(a) The figures shown for the years 1901 to 1950-51 represent the annual averages for the periods covered. See text above. From 1914-15 onwards the particulars relate to financial years. (b) Prior to 1906, ships' stores were included in exports. For the value of such goods shipped on oversea vessels and aircraft during each of the years 1953-54 to 1957-58 see table on p. 486.

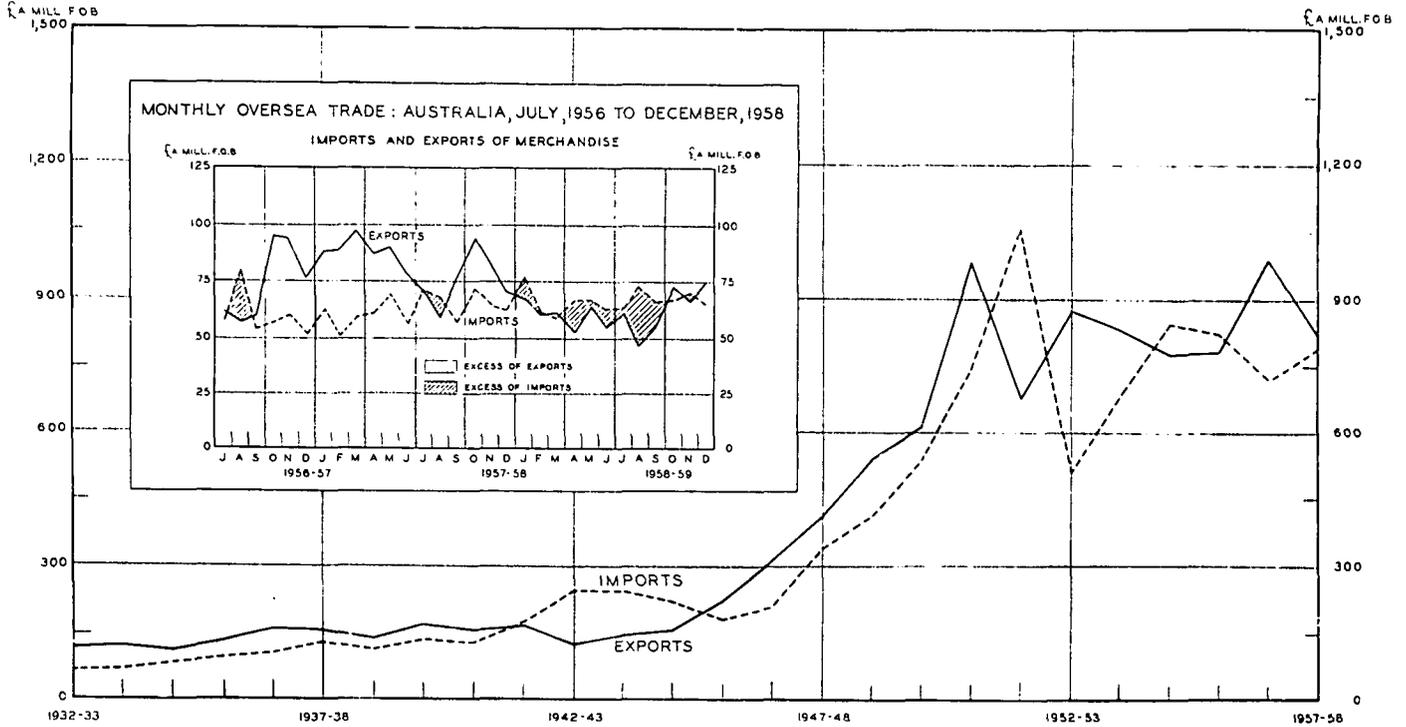
In issues of the Official Year Book prior to No. 23, fluctuations in the value of the oversea trade of Australia for earlier years were treated in some detail. The enhanced prices ruling for commodities and the peculiar conditions affecting Australian trade were responsible for the high value of imports in the years following the 1914-18 War, and these factors should be taken into consideration in making comparisons with earlier years. In the three years ended 1928-29, imports fell while exports were well maintained, but in 1929-30 both imports and exports declined substantially. The full effects of the economic depression are reflected in the greatly diminished trade figures for the period 1931-32 to 1935-36 and some years thereafter. The lowest level was recorded in 1931-32, when the total trade amounted to £137,538,000.

The outbreak of war in the Pacific in 1941 resulted in a substantial increase in the value of imports during the years 1941-42 to 1945-46. Since the end of the war the annual values of imports and exports have increased considerably, largely because of higher prices.

A graph showing the oversea trade of Australia from 1932-33 to 1957-58 appears on the next page.

2. **Excluding Gold.**—The fluctuations in recent years in merchandise trade (including silver as merchandise) are shown more clearly in the following table, from which *all* gold movements have been excluded.

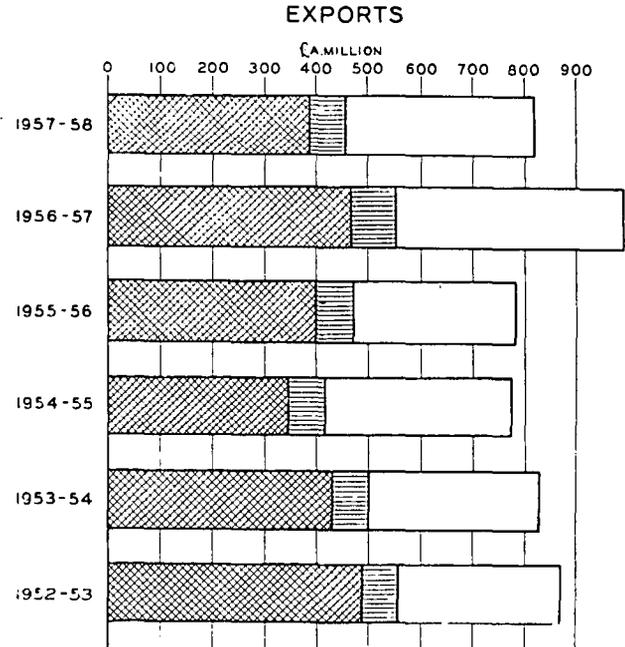
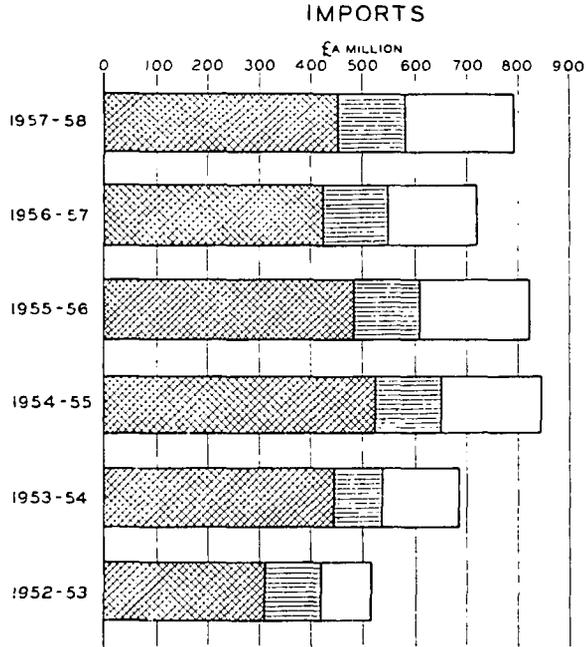
# OVERSEA TRADE: AUSTRALIA, 1932-33 TO 1957-58



# OVERSEA TRADE ACCORDING TO MONETARY AREAS

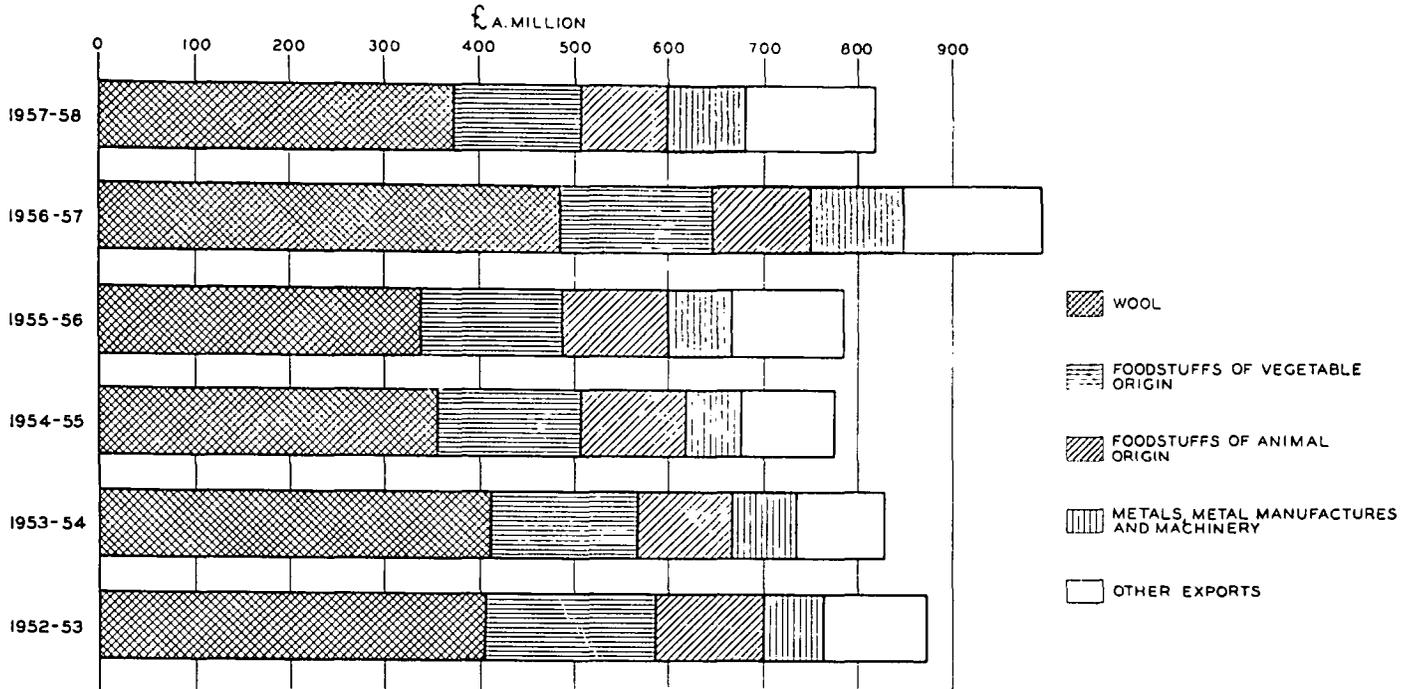
AUSTRALIA, 1952-53 TO 1957-58

STERLING AREA
  DOLLAR AREA
  OTHER NON-STERLING AREAS



# EXPORTS OF PRINCIPAL COMMODITIES

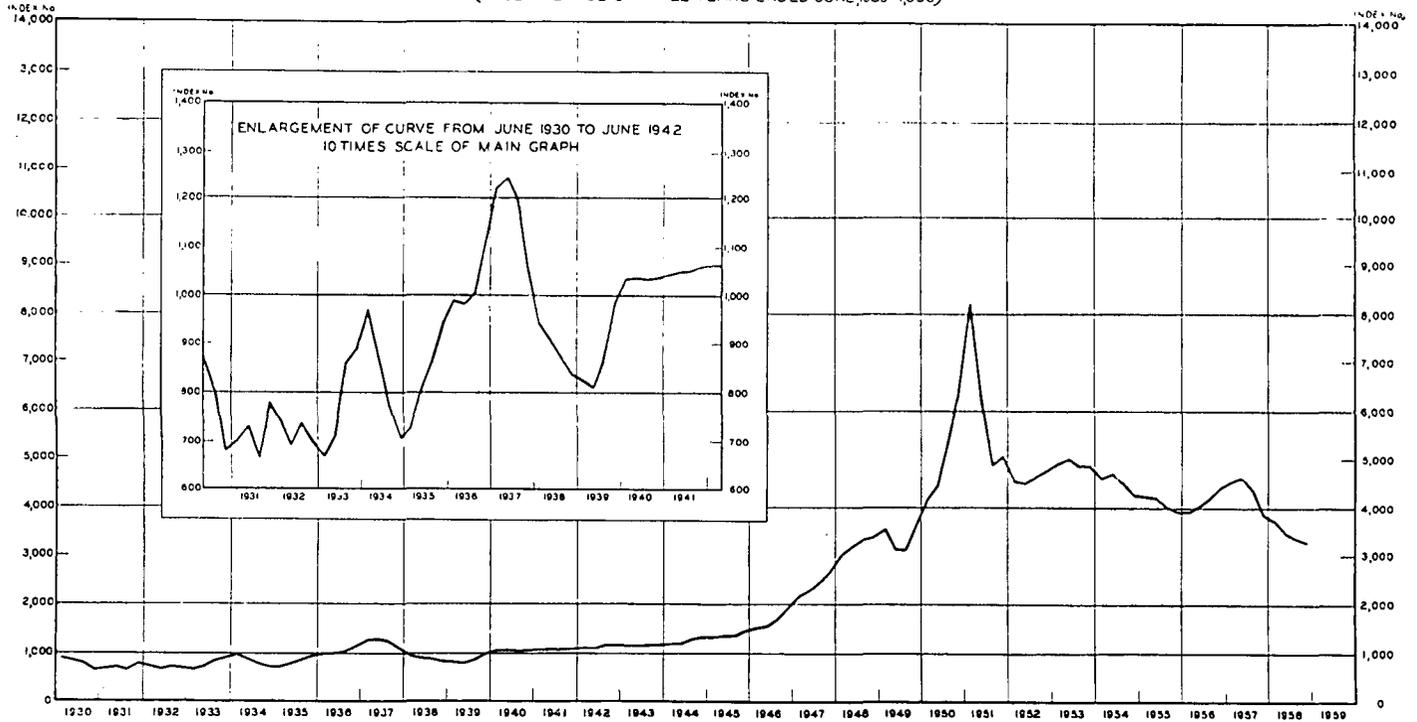
AUSTRALIA, 1952-53 TO 1957-58



# EXPORT PRICE INDEX NUMBERS : AUSTRALIA, 1930 to 1958

SIMPLE AGGREGATIVE INDEX - FIXED WEIGHTS

(BASE AVERAGE OF THREE YEARS ENDED JUNE, 1939=1,000)



**OVERSEA TRADE : AUSTRALIA.**  
(EXCLUDING GOLD.)

Year.	Value. (£'000.)			Value per Head of Population.(£)		
	Imports.	Exports.	Total.	Imports.	Exports.	Total.
1953-54 .. ..	678,650	814,563	1,493,213	76.3	91.5	167.8
1954-55 .. ..	841,018	760,446	1,601,464	92.5	83.7	176.2
1955-56 .. ..	818,343	773,540	1,591,883	87.9	83.0	170.9
1956-57 .. ..	716,720	978,679	1,695,399	75.2	102.6	177.8
1957-58 .. ..	789,308	812,799	1,602,107	81.0	83.4	164.4

**§ 7. Direction of Oversea Trade.**

1. According to Countries.—(i) *Values.* The following table shows the value of Australian imports and exports during each of the years 1955-56 to 1957-58, according to country of origin or consignment respectively.

**COUNTRIES OF ORIGIN OR CONSIGNMENT OF AUSTRALIAN IMPORTS AND EXPORTS : VALUES.**

(EXCLUDING GOLD.)  
(£'000.)

Country.	Imports.			Exports.		
	1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
<i>Commonwealth Countries—</i>						
United Kingdom .. ..	355,912	296,251	325,007	257,334	277,475	221,406
Australian Territories .. ..	6,859	7,422	7,914	15,102	16,013	16,073
Canada .. ..	23,306	22,157	23,046	10,911	10,681	14,133
Ceylon .. ..	8,632	9,863	8,772	8,687	10,582	5,939
India .. ..	23,469	24,509	23,416	12,159	28,580	11,689
Malaya, Federation of .. ..	16,229	10,875	10,708	9,337	9,088	12,266
New Zealand .. ..	8,254	11,593	12,372	40,920	50,945	55,402
Singapore .. ..	1,453	873	912	12,100	14,129	12,685
Other Commonwealth Countries	32,123	37,234	38,353	30,195	41,044	42,216
<i>Total, Commonwealth Countries</i>	<i>476,237</i>	<i>420,777</i>	<i>450,500</i>	<i>396,745</i>	<i>458,537</i>	<i>397,809</i>
<i>Foreign Countries—</i>						
Arabian States .. ..	28,607	23,449	29,289	2,039	3,174	2,614
Belgium-Luxemburg .. ..	11,578	7,462	6,543	26,173	35,039	28,111
France .. ..	15,626	9,297	10,333	67,314	91,974	69,841
Germany, Federal Republic of	34,998	31,079	41,516	36,431	46,948	33,128
Indonesia .. ..	22,401	26,356	28,089	6,705	6,820	4,051
Italy .. ..	11,821	9,112	10,768	34,621	52,953	46,344
Japan .. ..	22,592	12,884	23,815	86,490	138,877	102,717
Netherlands .. ..	13,233	10,555	11,073	6,192	5,547	5,622
Sweden .. ..	12,048	11,510	11,700	3,483	2,440	4,014
United States of America .. ..	98,790	95,544	104,453	54,998	66,097	45,353
Other Foreign Countries .. ..	69,335	57,333	60,659	52,337	65,952	73,567
<i>Total, Foreign Countries</i>	<i>341,029</i>	<i>294,581</i>	<i>338,238</i>	<i>376,783</i>	<i>515,821</i>	<i>415,362</i>
<i>Country unknown .. ..</i>	<i>1,077</i>	<i>1,362</i>	<i>570</i>	<i>12</i>	<i>4,321</i>	<i>5,628</i>
<b>Total .. ..</b>	<b>818,343</b>	<b>716,720</b>	<b>789,308</b>	<b>773,540</b>	<b>978,679</b>	<b>812,799</b>

(ii) *Proportions.* In view of the fluctuations in the total values of imports and exports, it is somewhat difficult to ascertain from the preceding table the relative importance of the various countries in the trade of Australia. A better idea of the proportions of imports supplied by the various countries and of their relative importance as markets for Australian exports during the years 1955-56 to 1957-58 may be obtained from the following table.

**COUNTRIES OF ORIGIN OR CONSIGNMENT OF AUSTRALIAN IMPORTS AND EXPORTS : PROPORTIONS.**

(EXCLUDING GOLD.)

(Per Cent. of Total.)

Country.	Imports.			Exports.		
	1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
<i>Commonwealth Countries—</i>						
United Kingdom .. ..	43.49	41.33	41.18	33.27	28.35	27.24
Australian Territories ..	0.84	1.04	1.00	1.95	1.64	1.98
Canada .. .. .	2.85	3.09	2.92	1.41	1.09	1.74
Ceylon .. .. .	1.05	1.38	1.11	1.12	1.08	0.73
India .. .. .	2.87	3.41	2.97	1.57	2.92	1.44
Malaya, Federation of ..	1.98	1.52	1.36	1.21	0.93	1.51
New Zealand .. .. .	1.01	1.62	1.57	5.29	5.21	6.82
Singapore .. .. .	0.18	0.12	0.11	1.57	1.44	1.56
Other Commonwealth Countries	3.93	5.20	4.86	3.90	4.19	5.19
<i>Total, Commonwealth Countries</i>	<i>58.20</i>	<i>58.71</i>	<i>57.08</i>	<i>51.29</i>	<i>46.85</i>	<i>48.21</i>
<i>Foreign Countries—</i>						
Arabian States .. .. .	3.50	3.27	3.71	0.26	0.32	0.32
Belgium-Luxemburg .. ..	1.42	1.04	0.84	3.38	3.58	3.46
France .. .. .	1.91	1.30	1.30	8.70	9.40	8.59
Germany, Federal Republic of	4.28	4.34	5.26	4.71	4.80	4.08
Indonesia .. .. .	2.74	3.68	3.56	0.87	0.70	0.50
Italy .. .. .	1.44	1.27	1.36	4.48	5.41	5.70
Japan .. .. .	2.76	1.80	3.02	11.18	14.19	12.64
Netherlands .. .. .	1.62	1.47	1.40	0.80	0.57	0.69
Sweden .. .. .	1.47	1.60	1.48	0.45	0.25	0.49
United States of America ..	12.07	13.33	13.23	7.11	6.75	5.58
Other Foreign Countries ..	8.46	8.00	7.69	6.77	6.74	9.05
<i>Total, Foreign Countries</i> ..	<i>41.67</i>	<i>41.10</i>	<i>42.85</i>	<i>48.71</i>	<i>52.71</i>	<i>51.10</i>
<i>Country unknown</i> .. .. .	<i>0.13</i>	<i>0.19</i>	<i>0.07</i>	<i>..</i>	<i>0.44</i>	<i>0.69</i>
<b>Total</b> .. .. .	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

2. According to Monetary Areas.—The following table shows the trade of Australia according to monetary areas during the years 1956-57 and 1957-58.

The sterling area includes the United Kingdom, its colonies and dependencies, all other countries of the British Commonwealth (except Canada and the New Hebrides Condominium) and certain non-British countries of which the most important are Burma, Bahrain Islands, other Arabian States (excluding Saudi Arabia and Yemen) and Iceland.

The dollar area is comprised of the United States of America and dependencies, Canada, Mexico, other Central American countries, Bolivia, Colombia, Ecuador, Venezuela, the Philippines and Liberia.

The O.E.E.C. area consists of non-sterling members of the Organization for European Economic Co-operation, namely, Belgium, France, Italy, Norway, the Netherlands and Portugal together with their associated States and dependencies, Austria, Denmark, the Federal Republic of Germany, Greece, Luxemburg, Sweden, Switzerland, Trieste, Turkey and the New Hebrides Condominium.

Of the remaining countries grouped under "other non-sterling", the more important as regards trade with Australia are Czechoslovakia, Finland, Poland, Spain, the Union of Soviet Socialist Republics, Egypt, Iran, Saudi Arabia, Japan, Indonesia, Thailand, Brazil and Chile.

**OVERSEA TRADE OF AUSTRALIA ACCORDING TO MONETARY AREAS.**  
(INCLUDING GOLD.)  
(£'000.)

Monetary Area.	1956-57.	1957-58.
<b>STERLING.</b>		
Imports—		
From—United Kingdom .. .. .	296,251	325,007
Other Sterling Area Countries .. .. .	126,080	127,344
Total .. .. .	422,331	452,351
Exports—		
To—United Kingdom .. .. .	277,476	221,421
Other Sterling Area Countries .. .. .	190,878	165,989
Total .. .. .	468,354	387,410
Excess of Exports (+) or Imports (—)	+46,023	-64,941
<b>DOLLAR.</b>		
Imports—		
From—United States of America .. .. .	95,544	104,453
Canada .. .. .	22,157	23,046
Other Dollar Area Countries .. .. .	4,806	3,567
Total .. .. .	122,507	131,066
Exports—		
To—United States of America .. .. .	66,111	45,404
Canada .. .. .	10,681	14,133
Other Dollar Area Countries .. .. .	9,341	10,782
Total .. .. .	86,133	70,319
Excess of Exports (+) or Imports (—)	-36,374	-60,747
<b>OTHER NON-STERLING.</b>		
Imports—		
From—Countries of the O.E.E.C., including dependencies .. .. .	100,656	115,248
Other Countries .. .. .	73,497	93,275
Total .. .. .	174,153	208,523
Exports—		
To—Countries of the O.E.E.C., including dependencies .. .. .	250,822	201,417
Other Countries .. .. .	187,597	160,005
Total .. .. .	438,419	361,422
Excess of Exports (+) or Imports (—)	+264,266	+152,899
<b>ALL MONETARY AREAS.</b>		
Total Imports .. .. .	718,991	791,940
Total Exports .. .. .	992,906	819,151
Excess of Exports (+) or Imports (—)	+273,915	+27,211

A graph showing the overseas trade of Australia according to monetary areas for the years 1952-53 to 1957-58 will be found on page 472.

### § 8. Trade with the United Kingdom.

1. *Statistical Classes.*—The following table shows, according to statistical classes, the value of imports into Australia of United Kingdom origin and of exports from Australia to the United Kingdom during each of the years 1955-56 to 1957-58.

**TRADE WITH THE UNITED KINGDOM : CLASSES.**  
(£'000.)

Class.	Imports.			Exports.		
	1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
I. Foodstuffs of animal origin, etc.	1,408	1,030	1,443	80,161	64,764	55,718
II. Foodstuffs of vegetable origin; non-alcoholic beverages, etc.	1,031	352	649	57,396	57,881	55,023
III. Alcoholic liquors, etc. ..	1,742	1,467	1,796	432	688	616
IV. Tobacco, etc. ..	875	417	453	22	76	104
V. Live animals ..	254	138	204	2	8	18
VI. Animal substances, etc. ..	395	367	388	86,039	120,397	82,105
VII. Vegetable substances, etc. ..	830	1,103	1,660	867	1,125	116
VIII. Apparel, textiles, etc. ..	51,672	41,560	46,973	194	199	217
IX. Oils, fats and waxes ..	883	1,327	1,054	2,218	1,726	2,077
X. Pigments, paints and varnishes ..	3,145	3,454	4,375	27	4	3
XI. Rocks, minerals, etc. ..	485	463	538	4,633	3,859	3,932
XII. Metals, metal manufactures and machinery ..	203,334	170,153	176,870	19,809	19,878	14,364
XIII. Rubber and leather, etc. ..	3,540	2,773	2,945	1,654	1,961	2,309
XIV. Wood and wicker, etc. ..	368	299	354	534	531	687
XV. Earthenware, etc. ..	8,495	6,733	7,289	15	14	6
XVI. Paper and stationery ..	22,644	20,217	21,573	282	318	543
XVII. Jewellery, etc. ..	2,914	1,892	2,560	60	70	74
XVIII. Optical, surgical and scientific instruments ..	5,607	5,057	5,517	79	173	331
XIX. Chemicals, medicinal products, essential oils, fertilizers ..	14,581	14,398	18,466	488	309	333
XX. Miscellaneous ..	(a)31,740	(a)23,051	(a)29,899	2,269	1,656	1,624
XXI. Gold and silver; bronze specie ..	..	..	1	233	1,839	1,221
<b>Total ..</b>	<b>355,913</b>	<b>296,251</b>	<b>325,007</b>	<b>257,414</b>	<b>277,476</b>	<b>221,421</b>

(a) Includes outside packages.

2. Imports of Principal Articles.—The following table shows the value of the principal articles imported into Australia from the United Kingdom during each of the years 1955-56 to 1957-58.

**IMPORTS OF PRINCIPAL ARTICLES OF UNITED KINGDOM ORIGIN : AUSTRALIA.**  
(£'000.)

Article.	1955-56.	1956-57.	1957-58.	Article.	1955-56.	1956-57.	1957-58.
<b>Arms and ammunition, military, naval and air force stores ..</b>	<b>5,205</b>	<b>3,418</b>	<b>4,412</b>	Optical, surgical and scientific instruments ..	4,025	3,728	3,803
Apparel ..	5,164	3,102	4,526	Paper printing ..	8,848	7,381	6,801
Carpets ..	5,976	3,445	4,005	<b>Piece-goods—</b>			
Chemicals, medicinal products, essential oils and fertilizers ..	14,581	14,398	18,466	Cotton and linen ..	14,565	12,279	13,202
Cigarettes ..	802	348	295	Silk and rayon(a) ..	4,544	2,657	2,564
Crockery ..	3,314	2,334	2,434	All other piece-goods ..	5,000	4,226	4,529
Cutlery ..	2,052	1,643	1,595	Prefabricated houses and buildings ..	806	325	113
Electrical cable and wire, covered ..	1,828	721	786	Rubber and rubber manufactures ..	2,938	2,267	2,412
Electrical machinery and appliances ..	25,980	24,223	23,683	Sewing silks, cottons, etc. ..	2,095	2,427	2,218
Glass and glassware ..	2,976	2,929	3,130	Stationery and paper manufactures ..	9,208	8,790	9,952
Iron and steel—				Tools of trade ..	2,728	2,254	2,276
Plate and sheet ..	14,423	13,886	10,415	Vehicles, parts and accessories ..	60,779	39,823	44,312
Other ..	10,147	6,625	5,374	Yarns—			
Linoleums ..	2,934	2,259	2,319	Cotton ..	2,446	2,763	3,676
<b>Machines and machinery (except dynamo electrical)—</b>				Rayon ..	5,868	5,989	6,900
Agricultural ..	3,487	2,097	1,444	Other ..	474	479	481
Metal-working ..	5,401	6,585	5,718	All other articles(b) ..	73,900	61,069	74,561
Motive-power ..	25,730	24,772	24,043				
Other ..	27,688	27,009	34,562	<b>Total Imports ..</b>	<b>355,912</b>	<b>296,251</b>	<b>325,007</b>

(a) Includes tyre cord fabric.

(b) Includes outside packages.

3. Exports of Principal Articles of Australian Produce.—The following table shows the quantities and values of the principal articles of Australian produce exported to the United Kingdom during each of the years 1955-56 to 1957-58.

PRINCIPAL ARTICLES EXPORTED TO THE UNITED KINGDOM : AUSTRALIA.  
(Australian Produce.)

Article.	Unit of Quantity.	Quantity.			Value.(£'000.)		
		1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
Barley .. .. .	ton	71,897	59,950	54,517	1,441	1,269	1,090
Butter .. .. .	"	72,420	62,553	41,509	24,464	20,085	12,271
Cheese .. .. .	"	13,630	13,934	5,793	2,231	2,382	750
Eggs in shell .. .. .	'000 doz.	12,902	6,852	5,195	2,115	1,238	745
Flour .. .. .	ton(a)	67,079	80,735	43,156	1,767	2,230	1,280
Fruit, dried .. .. .	ton	37,549	24,322	36,309	4,763	3,791	5,795
" fresh .. .. .	'000 bus.	3,869	3,307	4,904	5,047	4,871	7,975
" preserved in airtight containers .. .. .	ton	84,542	52,380	67,965	14,100	8,829	11,334
Gold .. .. .	'000 fine oz.	5	..	1	80	1	15
Hides and skins .. .. .	"	..	..	..	2,745	2,725	2,311
Lead bullion .. .. .	ton	29,812	53,531	48,546	4,639	8,264	5,582
" pig .. .. .	"	85,089	54,541	58,274	11,368	7,481	5,634
Leather .. .. .	"	..	..	..	1,642	1,921	2,269
Meats preserved by cold process—							
Beef and veal .. .. .	ton	112,347	115,391	96,600	17,247	17,007	15,084
Lamb .. .. .	"	32,683	19,634	24,664	6,967	3,754	5,144
Mutton .. .. .	"	10,757	6,830	11,024	1,342	867	1,166
Pork .. .. .	"	450	167	274	128	64	74
Meats, tinned .. .. .	"	49,134	38,990	45,785	15,427	10,104	11,421
Milk and cream .. .. .	'000 lb.	24,550	19,890	9,769	955	932	460
Silver bullion .. .. .	'000 fine oz.	348	4,444	3,037	141	1,830	1,201
Sugar (cane) .. .. .	ton	327,127	367,488	358,487	13,909	16,616	17,850
Tallow, inedible .. .. .	"	11,445	9,153	4,485	884	707	353
Timber, undressed(b) .. .. .	'000 super ft.	1,412	2,790	3,087	95	183	188
Wheat .. .. .	ton	548,030	715,165	262,284	12,783	16,767	6,980
Wine, fermented .. .. .	'000 gal.	896	1,308	1,106	422	675	602
Wool .. .. .	'000 lb.	300,852	331,876	271,653	83,088	117,372	79,583
Zinc bars, etc. .. .. .	ton	9,896	10,103	3,801	1,181	1,190	307
All other articles .. .. .	"	..	..	..	23,412	21,806	21,909
<b>Total Exports (Australian Produce) .. .. .</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>254,383</b>	<b>274,961</b>	<b>219,373</b>

(a) 2,000 lb. (b) Excludes railway sleepers.

4. Imports from the United Kingdom and Competing Countries.—Since 1908, permanent resident Commissioners appointed by the British Board of Trade have been located in Australia for the purpose of advising manufacturers and merchants in the United Kingdom with regard to Australian trade affairs. From 8th August, 1907, the Commonwealth Customs Tariffs have provided preferential rates of customs duties on certain goods the produce or manufacture of the United Kingdom, with the object of assisting the British manufacturer to retain or improve his position in this market in relation to other countries. The main provisions in these Acts relating to preference are dealt with on previous pages in this chapter.

In an investigation into the relative position occupied by the United Kingdom in the import trade of Australia, the comparison must, of course, be restricted to those classes of goods which are produced or manufactured in the United Kingdom. Imports into Australia include many commodities, such as tea, rice, raw coffee, unmanufactured tobacco, petroleum products, copra, timber, etc., which the United Kingdom cannot supply. These items, in addition to others not available from that country, have therefore been omitted from the computation following.

The imports into Australia have been classified under nine headings, and the trade of the United Kingdom therein is compared with that of France, Germany, Japan and the United States of America. These countries have been selected as the principal competitors in normal times with the United Kingdom for the trade of Australia under the specified headings. Totals for each of the years 1955-56 to 1957-58 are shown in the following table.

**IMPORTS FROM THE UNITED KINGDOM AND ITS MAIN COMPETITORS.**  
(£'000.)

Nature of Imports.	Year.	United Kingdom.	France.	Federal Republic of Germany.	Japan.	United States of America.	All Countries.
Foodstuffs of animal origin	1955-56	1,408	11	201	1,801	82	7,566
	1956-57	1,031	6	171	999	139	5,689
	1957-58	1,442	5	180	1,368	934	8,395
Yarns and manufactured fibres, textiles and apparel	1955-56	51,672	5,105	4,821	9,097	568	111,341
	1956-57	41,560	2,636	3,574	7,227	505	91,354
	1957-58	46,973	3,191	4,909	15,722	771	108,499
Metals, metal manufactures and machinery	1955-56	203,334	6,274	15,995	7,202	54,986	322,068
	1956-57	170,153	3,368	14,172	1,309	49,245	265,247
	1957-58	176,870	3,524	20,832	1,284	51,208	282,404
Rubber and leather and manufactures thereof, and substitutes therefor	1955-56	3,540	217	152	25	3,083	22,821
	1956-57	2,773	198	114	21	3,280	17,384
	1957-58	2,945	226	144	28	4,119	17,406
Earthenware, cement, china, glass and stoneware	1955-56	8,495	419	889	1,218	475	14,291
	1956-57	6,732	391	657	946	784	12,188
	1957-58	7,289	372	642	1,331	811	13,347
Pulp, paper and board; paper manufactures and stationery	1955-56	22,644	238	859	242	1,504	43,616
	1956-57	20,217	46	784	164	1,962	41,793
	1957-58	21,574	77	818	268	2,101	45,089
Sporting material, toys, fancy goods, jewellery and timepieces	1955-56	2,914	128	2,245	920	17	10,069
	1956-57	1,892	98	1,385	580	39	6,783
	1957-58	2,560	138	1,555	988	28	8,459
Optical, surgical and scientific instruments, etc.; photographic goods, n.e.i.	1955-56	5,607	134	1,686	292	1,864	10,803
	1956-57	5,057	79	1,338	241	2,146	9,990
	1957-58	5,517	97	2,133	601	2,239	12,169
Chemicals, medicinal and pharmaceutical products, essential oils and fertilizers	1955-56	14,581	1,095	3,747	253	2,373	29,855
	1956-57	14,398	1,254	4,391	182	2,032	30,429
	1957-58	18,466	1,244	4,506	728	3,516	37,498
Total, competitive imports	1955-56	314,195	13,621	30,595	21,050	64,952	572,430
	1956-57	263,813	8,076	26,586	11,669	60,132	480,857
	1957-58	283,636	8,874	35,719	22,318	65,727	533,266
Total imports (less bullion and specie) (a)	1955-56	355,913	15,626	34,998	22,592	98,790	818,293
	1956-57	296,251	9,297	31,079	12,884	95,544	716,682
	1957-58	325,006	10,332	41,516	23,815	104,453	789,261

(a) Includes outside packages.

The principal classes of competitive imports are metals, metal manufactures and machinery (value £282,404,000 in 1957-58) and manufactured fibres, textiles and apparel (value £108,499,000 in 1957-58). The value of goods included in these two groups represented 73.3 per cent. of the total value of competitive commodities during 1957-58. In 1957-58, the United Kingdom supplied 53.2 per cent. of the total value of competitive goods.

### § 9. Trade with Eastern Countries.

1. **Merchandise Trade according to Countries.**—The values of imports from and exports to Eastern countries during the years 1955-56 to 1957-58 are shown in the following table. The principal commodities imported in 1957-58 according to countries of origin were:—Borneo (British)—crude petroleum, £11,003,000, timber, hardwood, £1,922,000; Ceylon—tea, £7,650,000; India—bags and sacks, £8,088,000, cotton and linen piece-goods, £4,175,000,

hessian, £2,626,000, tea, £1,626,000 and petroleum, £1,876,000; Malaya—crude rubber £5,993,000, latex, £1,382,000, timber, £1,701,000 and tin, £1,025,000; Japan—metals and metal manufactures, £901,000, cotton and linen piece-goods, £12,086,000, other textiles, £2,674,000, tinned fish, £1,184,000; Indonesia—petroleum spirit, £3,026,000, kerosene, £2,752,000, crude petroleum, £15,385,000, residual and solar oil, £551,000, tea, £2,580,000.

**MERCHANDISE TRADE WITH EASTERN COUNTRIES : AUSTRALIA.**  
(£'000.)

Country.	Imports.(a)			Exports.		
	1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
<i>Commonwealth Countries—</i>						
Borneo .. .. .	9,801	15,224	13,222	1,042	1,027	1,231
Ceylon .. .. .	8,632	9,863	8,772	6,257	9,819	5,939
Hong Kong .. .. .	2,775	2,806	3,345	5,927	9,412	6,344
India .. .. .	23,469	24,509	23,416	12,159	28,580	11,689
Malaya, Federation of .. .. .	16,229	10,875	10,708	9,337	9,088	12,266
Pakistan .. .. .	2,006	1,200	799	1,816	6,744	5,170
Singapore .. .. .	1,453	873	912	12,100	14,129	12,685
<i>Foreign Countries—</i>						
Bhutan and Nepal .. .. .	3	..	..	..	..	..
Burma .. .. .	60	14	16	2,040	2,467	1,525
Cambodia .. .. .	1	1	1	66	40	38
China (Mainland) .. .. .	2,275	2,115	3,114	2,701	6,438	9,768
Formosa .. .. .	83	45	63	828	575	503
Indonesia .. .. .	22,401	26,356	28,089	6,705	6,820	4,051
Japan .. .. .	22,592	12,884	23,815	86,490	138,877	102,717
Korea, Republic of .. .. .	2	6	1	516	1,125	1,557
Laos .. .. .	..	..	..	351	204	15
Philippines .. .. .	121	186	176	2,190	3,812	4,873
<i>Portuguese Dependencies—</i>						
India (Portuguese) .. .. .	..	..	..	76	139	139
Macao .. .. .	1	..	35	2	1	2
Timor .. .. .	37	24	17	24	33	220
Thailand .. .. .	167	242	198	1,353	1,631	1,627
Vietnam, North .. .. .	..	..	..	..	..	128
Vietnam, South .. .. .	1	1	4	15	14	102
<b>Total .. .. .</b>	<b>112,109</b>	<b>107,224</b>	<b>116,703</b>	<b>151,995</b>	<b>240,975</b>	<b>182,589</b>

(a) Includes outside packages.

The balance of trade with Eastern countries shows an excess of exports from Australia during each of the years 1955-56 to 1957-58.

2. Exports of Principal Articles.—The following table shows the value of exports (including re-exports) from Australia to Eastern countries for each of the years 1955-56 to 1957-58. The countries concerned in this trade are listed in the previous table.

**TOTAL EXPORTS FROM AUSTRALIA TO EASTERN COUNTRIES.**  
(£'000.)

Article.	1955-56.	1956-57.	1957-58.	Article.	1955-56.	1956-57.	1957-58.
Animal (except marine) oils and fats .. .. .	1,997	2,424	2,480	Meats .. .. .	3,556	5,380	4,298
Army stores .. .. .	2,472	1,037	1,030	Metals and metal manufactures except zinc bars, etc. .. .. .	3,553	22,596	13,495
Butter .. .. .	2,003	2,299	1,686	Milk and cream .. .. .	6,512	6,910	7,224
Cheese .. .. .	711	860	397	Sugar (raw) .. .. .	3,343	3,913	7,209
Fruit, fresh or preserved .. .. .	1,396	1,481	1,305	Wool .. .. .	71,704	115,657	88,874
Grain and cereals—				Zinc bars, blocks, etc. .. .. .	2,562	2,354	2,145
Flour (wheaten), plain white	14,658	14,498	9,219	Other merchandise .. .. .	13,580	21,714	21,451
Wheat .. .. .	12,629	23,978	10,577	<b>Total Merchandise .. .. .</b>	<b>151,995</b>	<b>240,975</b>	<b>182,589</b>
Other (prepared and unprepared) .. .. .	7,275	9,489	5,767	Gold and silver; bronze specie .. .. .	10,636	14,783	6,242
Infants' and invalids' foods	1,381	2,155	2,115	<b>Total Exports .. .. .</b>	<b>162,631</b>	<b>255,758</b>	<b>188,831</b>
Leather .. .. .	647	814	805				
Machines and machinery .. .. .	2,016	3,416	2,512				

## § 10. Oversea Trade at Principal Ports.

The following table shows the value of overseas imports and exports at the principal ports of Australia during the year 1957-58, and the totals for each State and Territory.

OVERSEA TRADE AT PRINCIPAL PORTS, 1957-58.  
(£'000.)

Port.	Imports.	Exports.	Port.	Imports.	Exports.
NEW SOUTH WALES.			SOUTH AUSTRALIA.		
Sydney, including Botany Bay .. ..	340,245	189,647	Port Adelaide, including Adelaide .. ..	45,829	67,459
Newcastle, including Port Stephens .. ..	7,525	33,142	Port Pirie .. ..	299	22,378
Port Kembla .. ..	4,883	6,914	Port Lincoln .. ..	497	5,368
Other .. ..		829	Wallaroo .. ..	307	3,763
Total .. ..	352,653	230,532	Other .. ..	170	914
			Total .. ..	47,102	99,882
VICTORIA.			WESTERN AUSTRALIA.		
Melbourne .. ..	255,803	203,699	Fremantle, including Perth and Kwinana .. ..	44,815	75,305
Geelong .. ..	26,083	11,937	Geraldton .. ..	190	3,525
Portland .. ..	827	3,942	Bunbury .. ..	334	3,117
Total .. ..	282,713	219,578	Other .. ..	549	7,811
			Total .. ..	45,888	89,758
QUEENSLAND.			TASMANIA.		
Brisbane .. ..	44,945	97,498	Hobart .. ..	8,586	14,174
Townsville .. ..	2,089	22,513	Launceston .. ..	2,380	5,073
Mackay .. ..	193	14,499	Burnie .. ..	1,038	2,224
Cairns .. ..	1,245	7,722	Devonport .. ..	940	782
Bowen .. ..		6,099	Total .. ..	12,944	22,253
Rockhampton .. ..	557	2,847			
Gladstone .. ..	441	1,971	NORTHERN TERRITORY.		
Maryborough .. ..	15	3,310	Darwin .. ..	1,089	655
Other .. ..	12	34	AUSTRALIAN CAPITAL TERRITORY.		
Total .. ..	49,498	156,493	Canberra .. ..	53	..
			Grand Total .. ..	791,940	819,151

## § 11. Classified Summary of Australian Oversea Trade.

1. Statistical Classes.—(i) *Imports and Exports.* The following table shows, according to statistical classes, the value of Australian imports and exports during each of the years 1955-56 to 1957-58.

TOTAL OVERSEA TRADE, AUSTRALIA: CLASSES.  
(£'000.)

Class.	Imports.			Exports.		
	1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
I. Foodstuffs of animal origin, etc.	7,566	5,689	8,395	113,366	101,944	93,212
II. Foodstuffs of vegetable origin; non-alcoholic beverages, etc.	22,059	25,815	26,560	148,760	163,160	133,102
III. Alcoholic liquors, etc. ..	2,101	1,684	2,125	1,460	1,954	1,891
IV. Tobacco, etc. ..	16,215	14,235	15,453	518	482	707
V. Live animals .. ..	727	755	721	1,188	1,636	1,843
VI. Animal substances, etc. ..	4,000	3,841	4,212	360,692	510,346	400,605
VII. Vegetable substances, etc. ..	17,590	19,238	19,424	2,653	2,863	1,076
VIII. Apparel, textiles, etc. ..	111,341	91,354	108,499	2,220	2,731	2,718
IX. Oils, fats and waxes .. ..	99,640	95,546	101,722	14,053	17,331	22,846
X. Pigments, paints and varnishes ..	5,937	6,516	7,647	977	1,087	897
XI. Rocks, minerals, etc. ..	7,293	5,638	7,320	22,677	31,279	28,099
XII. Metals, metal manufactures and machinery .. ..	322,068	265,247	282,404	64,494	97,426	81,606
XIII. Rubber and leather, etc. ..	22,821	17,384	17,406	3,279	3,925	4,385
XIV. Wood and wicker, etc. ..	17,881	17,137	16,737	2,985	3,737	4,535
XV. Earthenware, etc. ..	14,291	12,188	13,347	897	1,109	1,105
XVI. Paper and stationery .. ..	43,616	41,793	45,089	2,661	2,842	2,985
XVII. Jewellery, etc. ..	10,069	6,783	8,459	547	674	747
XVIII. Optical, surgical and scientific instruments .. ..	10,803	9,990	12,169	1,053	1,112	1,630
XIX. Chemicals, medicinal products, essential oils, fertilizers .. ..	29,855	30,429	37,498	5,196	5,590	6,517
XX. Miscellaneous .. ..	(a)52,420	(a)45,420	(a)54,074	21,161	21,770	21,001
XXI. Gold and silver; bronze specie ..	2,795	2,309	2,679	11,027	19,908	7,644
Total .. ..	821,088	718,991	791,940	781,864	992,906	819,151

(a) Includes outside packages.

(ii) *Exports—Australian Produce and Re-exports.* In the following table the exports from Australia of (a) Australian produce and (b) re-exports are shown according to statistical classes for each of the years 1955–56 to 1957–58.

## EXPORTS FROM AUSTRALIA : AUSTRALIAN PRODUCE AND RE-EXPORTS.

(£'000.)

Class.	Australian Produce.			Re-exports.		
	1955–56.	1956–57.	1957–58.	1955–56.	1956–57.	1957–58.
I. Foodstuffs of animal origin, etc.	113,307	101,895	93,181	59	49	31
II. Foodstuffs of vegetable origin; non-alcoholic beverages, etc.	148,465	162,821	132,677	295	339	425
III. Alcoholic liquors, etc. ..	1,448	1,943	1,884	12	11	7
IV. Tobacco, etc. ..	446	369	509	72	113	198
V. Live animals ..	1,097	1,521	1,694	91	115	149
VI. Animal substances, etc.	360,370	510,203	400,534	322	143	71
VII. Vegetable substances, etc. ..	2,624	2,831	1,055	29	32	21
VIII. Apparel, textiles, etc. ..	1,974	2,522	2,480	246	209	238
IX. Oils, fats and waxes ..	13,459	16,726	22,157	594	605	689
X. Pigments, paints and varnishes	939	1,020	868	38	67	29
XI. Rocks, minerals, etc. ..	22,440	31,097	28,022	237	182	77
XII. Metals, metal manufactures and machinery ..	60,299	93,049	76,774	4,195	4,377	4,832
XIII. Rubber and leather, etc. ..	3,252	3,855	4,345	27	70	40
XIV. Wood and wicker, etc. ..	2,928	3,638	4,453	57	99	82
XV. Earthenware, etc. ..	847	1,078	1,083	50	31	22
XVI. Paper and stationery ..	2,546	2,674	2,828	115	168	157
XVII. Jewellery, etc. ..	487	587	651	60	87	96
XVIII. Optical, surgical and scientific instruments ..	747	873	1,450	306	239	180
XIX. Chemicals, medicinal products, essential oils, fertilizers ..	5,008	5,371	6,251	188	219	266
XX. Miscellaneous ..	14,417	15,275	13,835	6,744	6,495	7,166
XXI. Gold and silver; bronze specie	10,990	19,896	7,627	37	12	17
Total ..	768,090	979,244	804,358	13,774	13,662	14,793

2. *Imports of Principal Articles.*—The next table shows the quantity, where available, and the value of the principal articles imported into Australia during each of the years 1955–56 to 1957–58.

## PRINCIPAL ARTICLES IMPORTED : AUSTRALIA.

Article.	Unit of Quantity.	Quantity.			Value. (£'000.)		
		1955–56.	1956–57.	1957–58.	1955–56.	1956–57.	1957–58.
Apparel—							
Blouses, skirts, costumes, etc. ..	..	..	..	..	704	377	733
Gloves ..	doz. prs.	495,562	332,871	484,196	1,358	892	1,327
Headwear ..	..	..	..	..	920	741	846
Men's and boys' outer clothing	..	..	..	..	637	270	467
Socks and stockings ..	..	..	..	..	537	231	377
Trimmings and ornaments ..	..	..	..	..	4,794	3,511	4,371
Other apparel and attire ..	..	..	..	..	2,519	1,610	2,187
Arms, explosives, military stores, etc	..	..	..	..	6,155	4,606	5,446
Bags and sacks ..	..	..	..	..	10,184	10,088	8,191
Carpet and carpeting ..	..	..	..	..	7,134	4,484	5,076
Chemicals, drugs, fertilizers ..	..	..	..	..	29,855	30,429	37,498
Crockery, etc. ..	..	..	..	..	4,555	3,276	3,546
Electrical machinery and appliances	..	..	..	..	33,617	34,785	36,410
Fibres ..	..	..	..	..	10,659	12,374	12,582
Glass and glassware ..	..	..	..	..	5,929	5,772	6,198
Iron and steel—							
Pipes, tubes and fittings ..	cwt.	285,046	276,090	362,722	1,398	1,480	2,108
Plate and sheet ..	..	4,471,564	3,231,512	2,109,090	21,302	18,080	12,366
Other ..	..	..	..	..	24,810	10,984	8,004
Machines and machinery (except dynamo electrical)—							
Agricultural ..	..	..	..	..	5,233	3,375	2,766
Metal-working ..	..	..	..	..	12,963	11,230	11,119
Motive power ..	..	..	..	..	43,475	38,494	39,715
Other ..	..	..	..	..	47,848	46,683	59,782

PRINCIPAL ARTICLES IMPORTED : AUSTRALIA—*continued.*

Article.	Unit of Quantity.	Quantity.			Value. (£'000.)		
		1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
Motor vehicles, chassis, bodies and parts .. .. .	..	..	..	..	77,105	52,648	59,187
Oils—							
Linseed .. .. .	'000 gal.	2,383	2,292	2,797	1,247	1,586	1,617
Petroleum and shale—							
Crude (a) .. .. .	mill. gal.	1,607	2,119	2,421	44,671	58,496	68,521
Kerosene .. .. .	'000 gal.	144,374	123,961	104,508	7,399	6,795	5,625
Lubricating (mineral) .. .. .	..	42,835	42,292	39,447	5,584	6,166	5,643
Petroleum and shale spirit .. .. .	..	455,577	193,274	179,030	27,766	12,577	11,004
Residual and solar .. .. .	..	138,492	37,417	28,442	5,603	1,716	1,472
Paper, printing .. .. .	..	..	..	..	16,768	16,235	16,762
Piece-goods—							
Canvas and duck .. .. .	'000 sq. yds.	7,982	7,962	7,021	1,264	1,108	951
Cotton and linen .. .. .	..	..	..	..	35,156	32,125	41,992
Silk and man-made fibre-yarn .. .. .	..	..	..	..	14,085	7,729	8,433
Woolen and containing wool .. .. .	..	..	..	..	1,438	1,036	1,482
All other piece-goods .. .. .	..	..	..	..	9,155	6,929	7,675
Plastics materials .. .. .	..	..	..	..	6,386	5,901	9,510
Prefabricated houses and buildings .. .. .	..	..	..	..	808	479	124
Rubber and rubber manufactures .. .. .	..	..	..	..	22,030	16,711	16,636
Stationery and paper manufactures .. .. .	..	..	..	..	11,650	11,213	12,922
Tea .. .. .	'000 lb.	46,326	61,504	55,762	11,196	14,723	12,132
Timber, undressed, including logs(b) .. .. .	'000 sup. ft.	322,792	311,210	304,814	14,109	13,434	12,748
Yarns—							
Cotton .. .. .	'000 lb.	5,297	5,998	7,858	2,496	2,802	3,703
Man-made fibres .. .. .	..	17,924	16,191	18,394	8,922	8,770	10,260
Woolen .. .. .	..	138	123	147	184	171	203
Other .. .. .	..	1,950	1,851	1,170	480	455	370
All other articles .. .. .	..	..	..	..	219,000	195,414	221,853
<b>Total Imports</b> .. .. .					<b>821,088</b>	<b>718,991</b>	<b>791,940</b>

(a) Includes once-run distillate. (b) Excludes dunnage and undressed timber not measured in super. feet.

3. Exports of Principal Articles of Australian Produce.—The following table shows the quantities and values of the principal articles of Australian produce exported during each of the years 1955-56 to 1957-58.

## EXPORTS OF PRINCIPAL ARTICLES OF AUSTRALIAN PRODUCE.

Article.	Unit of Quantity.	Quantity.			Value. (£'000.)		
		1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
Arms, ammunition, military, naval and air force stores .. .. .	..	..	..	..	3,067	1,568	961
Barley .. .. .	ton	470,210	591,548	430,017	10,471	12,745	9,474
Butter .. .. .	..	82,636	76,265	50,750	28,966	25,824	15,639
Cheese .. .. .	..	17,181	17,025	9,230	3,537	3,860	1,854
Chemicals, drugs, fertilizers .. .. .	..	..	..	..	5,008	5,371	6,251
Flour .. .. .	ton(a)	666,793	749,712	479,984	19,703	21,669	15,059
Fruit—							
Dried .. .. .	ton	62,931	46,301	60,299	7,803	6,586	9,142
Fresh, including frozen .. .. .	'000 bus.	6,689	5,678	7,992	9,139	8,585	13,060
Preserved in airtight containers .. .. .	ton	93,359	59,818	73,732	15,469	10,078	12,357
Gold .. .. .	'000 fine oz.	532	908	405	8,323	14,227	6,353
Hides and skins .. .. .	..	..	..	..	20,849	24,229	25,353
Lead, pig .. .. .	ton	145,987	167,380	164,061	19,539	22,915	15,820
Machines and machinery (except dynamo electrical) .. .. .	..	..	..	..	7,492	7,934	9,635
Meats preserved by cold process—							
Beef and veal .. .. .	ton	144,084	149,400	125,895	23,431	23,271	21,571
Lamb .. .. .	..	36,440	23,778	28,729	7,867	4,773	6,132
Mutton .. .. .	..	15,472	10,273	18,870	1,885	1,322	2,253
Pork .. .. .	..	1,104	642	960	364	271	318
Meats, tinned .. .. .	..	58,286	50,103	58,854	18,224	13,174	15,100
Milk and cream .. .. .	'000 lb.	127,278	132,880	118,940	8,915	9,645	9,280
Ores and concentrates .. .. .	ton	496,266	637,380	664,677	19,861	26,337	21,595
Sugar (cane) .. .. .	..	592,229	675,282	707,804	24,723	28,780	34,996
Wheat .. .. .	..	1,902,896	2,440,355	1,060,055	46,456	60,058	28,493
Wool (b) .. .. .	'000 lb.	1,263,983	1,407,529	1,197,446	337,508	483,704	373,397
All other articles .. .. .	..	..	..	..	119,490	162,318	150,265
<b>Total Exports (Australian Produce)</b> .. .. .					<b>768,090</b>	<b>979,244</b>	<b>804,358</b>

(a) 2,000 lb.

(b) Quantity in terms of greasy wool.

A graph showing exports in principal commodity groups in each of the years 1952-53 to 1957-58 will be found on page 473.

4. **Imports of Merchandise and Bullion and Specie.**—The table hereunder shows the value of imports into Australia during each of the years 1953-54 to 1957-58, grouped under the headings—Merchandise, and Bullion and Specie. The imports of merchandise are shown under the sub-headings of "free" and "dutiable" goods.

**IMPORTS OF MERCHANDISE AND BULLION AND SPECIE: AUSTRALIA.**

(£'000.)

Year.	Merchandise.			Bullion and Specie.	Total Imports.
	Free Goods.	Dutiable Goods.	Total		
1953-54.. ..	317,850	360,740	678,590	3,019	681,609
1954-55.. ..	399,063	441,909	840,972	2,770	843,742
1955-56.. ..	421,208	397,085	818,293	2,795	821,088
1956-57.. ..	403,496	313,186	716,682	2,309	718,991
1957-58.. ..	426,206	363,055	789,261	2,679	791,940

5. **Exports of Merchandise and Bullion and Specie.**—The next table shows the value of exports from Australia during each of the years 1953-54 to 1957-58, grouped under the headings—Merchandise, and Bullion and Specie. The exports of Australian produce and re-exports are shown separately.

**EXPORTS OF MERCHANDISE AND BULLION AND SPECIE: AUSTRALIA.**

(£'000.)

Year.	Merchandise.			Bullion and Specie.			Total Exports.
	Australian Produce.	Re-exports.	Total.	Australian Produce.	Re-exports.	Total.	
1953-54 .. ..	803,635	8,231	811,866	16,422	44	16,466	828,332
1954-55 .. ..	749,765	8,276	758,041	16,118	5	16,123	774,164
1955-56 .. ..	757,100	13,737	770,837	10,990	37	11,027	781,864
1956-57 .. ..	959,348	13,650	972,998	19,896	12	19,908	992,906
1957-58 .. ..	796,732	14,776	811,508	7,626	17	7,643	819,151

6. **Imports and Net Customs Revenue.**—The percentage of net Customs revenue, excluding primage, collected to the total value of all merchandise imported in each of the years 1953-54 to 1957-58 was as follows:—1953-54, 12.8 per cent.; 1954-55, 11.1 per cent.; 1955-56, 9.8 per cent.; 1956-57, 9.0 per cent., and 1957-58, 8.7 per cent. Primage duty was in force during these years and if this is added to net Customs revenue the percentages become:—1953-54, 14.0 per cent.; 1954-55, 12.1 per cent.; 1955-56, 10.7 per cent.; 1956-57, 9.6 per cent, and 1957-58, 9.1 per cent. The percentages of net Customs revenue, excluding primage, to the total value of dutiable goods only were: 1953-54, 24.0 per cent.; 1954-55, 21.1 per cent.; 1955-56, 20.2 per cent.; 1956-57, 20.5 per cent. and 1957-58, 19.0 per cent. The calculations are based on Australian currency values and on the assumption that the value of clearances approximated to the value of imports during the same period.

## § 12. Ships' and Aircraft Stores.

Prior to 1906, goods shipped in Australian ports on board oversea vessels as ships' stores were included in the general exports. From 1906, ships' and aircraft stores have been specially recorded as such, and have been omitted from the export figures. The value of these stores during each of the years 1953-54 to 1957-58, with oils separate, is shown in the following table:—

**VALUE OF STORES LOADED ON OVERSEA SHIPS AND AIRCRAFT: AUSTRALIA.**  
(£'000.)

Item.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Oils .. .. .	5,919	7,328	7,970	9,059	8,383
All Stores (including oils) ..	10,266	13,181	13,539	14,208	12,798

In addition to oils, the principal items supplied to oversea ships and aircraft in 1957-58 were:—Meats, £1,336,848; fruit and vegetables, £404,135; eggs, £151,255; butter, £56,044; ale, porter, beer, etc., £187,439; sea food, £135,839; coal, £50,656; flour £63,440; rice, £31,771; milk and cream, £44,463.

## § 13. Movement of Bullion and Specie.

1. Imports and Exports.—The following table shows the values of gold and silver bullion and specie and of bronze specie imported into and exported from Australia during each of the years 1955-56 to 1957-58.

**IMPORTS AND EXPORTS, BULLION AND SPECIE: AUSTRALIA.**  
(£.)

Item.	Imports.			Exports.		
	1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
Gold—Bullion ..	2,745,143	2,270,632	2,631,443	8,323,118	14,225,889	6,352,070
Specie ..	..	66	707	80	1,282	..
<i>Total</i> ..	<i>2,745,143</i>	<i>2,270,698</i>	<i>2,632,150</i>	<i>8,323,198</i>	<i>14,227,171</i>	<i>6,352,070</i>
Silver—Bullion ..	33,173	29,334	34,319	2,620,905	5,594,400	1,219,187
Specie ..	16,691	8,578	11,784	82,749	86,009	71,552
<i>Total</i> ..	<i>49,864</i>	<i>37,912</i>	<i>46,103</i>	<i>2,703,654</i>	<i>5,680,409</i>	<i>1,290,739</i>
Bronze—Specie ..	488	623	425	327	670	734
Total— Australian Pro- duce ..	..	..	..	10,990,312	19,896,015	7,626,405
Re-exports ..	..	..	..	36,867	12,235	17,138
<b>Grand Total</b> ..	<b>2,795,495</b>	<b>2,309,233</b>	<b>2,678,678</b>	<b>11,027,179</b>	<b>19,908,250</b>	<b>7,643,543</b>

2. Imports and Exports by Countries.—The next table shows the imports and exports of bullion and specie from and to various countries during the year 1957–58 :—

IMPORTS AND EXPORTS OF BULLION AND SPECIE BY COUNTRIES :  
AUSTRALIA, 1957-58.

(£.)

Country.	Imports.			Exports.		
	Bullion.	Specie.	Total.	Bullion.	Specie.	Total.
<i>Commonwealth Countries—</i>						
Australia (re-imported)	..	11,366	11,366	..	..	..
United Kingdom ..	..	407	407	1,215,821	5,426	1,221,247
<i>Australian Territories—</i>						
New Guinea ..	897,457	..	897,457	..	48,390	48,390
Norfolk Island ..	..	..	..	..	165	165
Papua ..	..	..	..	..	5,771	5,771
Hong Kong ..	..	..	..	6,230,851	..	6,230,851
New Zealand ..	396,710	..	396,710	70,935	8,031	78,966
<i>Pacific Islands (British)—</i>						
Fiji ..	1,371,587	..	1,371,587	2,219	3,858	6,077
Solomon Islands ..	..	658	658	..	300	300
Tonga ..	..	..	..	..	224	224
South Africa, Union of	..	..	..	..	121	121
<i>Total, Commonwealth Countries ..</i>	<i>2,665,754</i>	<i>12,431</i>	<i>2,678,185</i>	<i>7,519,826</i>	<i>72,286</i>	<i>7,592,112</i>
<i>Foreign Countries—</i>						
Austria ..	8	..	8	..	..	..
Germany, Federal Republic of ..	..	40	40	..	..	..
Switzerland ..	..	207	207	..	..	..
United States of America	..	51	51	51,431	..	51,431
<i>Total, Foreign Countries</i>	<i>8</i>	<i>298</i>	<i>306</i>	<i>51,431</i>	<i>..</i>	<i>51,431</i>
Country unknown ..	..	187	187	..	..	..
<b>Grand Total ..</b>	<b>2,665,762</b>	<b>12,916</b>	<b>2,678,678</b>	<b>7,571,257</b>	<b>72,286</b>	<b>7,643,543</b>

§ 14. Exports According to Industries.

1. Classification.—The following table provides an analysis of the total recorded value of Australian exports for the three successive financial years ended June, 1958. This analysis is designed to show fluctuations in the value of exports of Australian produce dissected according to the main industry of their origin, although any such classification is necessarily arbitrary in some respects.

## EXPORTS OF AUSTRALIAN PRODUCE ACCORDING TO INDUSTRIAL GROUPS.

Industrial Group.	Value. (£'000.)			Proportion of Value of Exports of Australian Produce (excluding Gold). (Per cent.)		
	1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
<b>Agriculture, Horticulture and Viticulture—</b>						
Unprocessed .. ..	77,038	91,455	56,495	10.2	9.5	7.1
Processed .. ..	73,263	73,705	77,028	9.6	7.6	9.6
Total .. ..	150,301	165,160	133,523	19.8	17.1	16.7
<b>Pastoral—</b>						
Unprocessed .. ..	353,929	486,237	388,386	46.5	50.4	48.7
Processed .. ..	71,579	81,192	74,384	9.4	8.4	9.3
Total .. ..	425,508	567,429	462,770	55.9	58.8	58.0
<b>Dairy and Farmyard—</b>						
Unprocessed .. ..	5,315	3,495	3,442	0.7	0.4	0.4
Processed .. ..	45,827	44,344	31,479	6.0	4.6	4.0
Total .. ..	51,142	47,839	34,921	6.7	5.0	4.4
<b>Mines and Quarries (other than Gold)—</b>						
Unprocessed .. ..	19,860	27,763	25,552	2.6	2.9	3.2
Processed .. ..	40,708	51,330	32,296	5.4	5.3	4.0
Total (a) .. ..	60,568	79,093	57,848	8.0	8.2	7.2
<b>Fisheries—</b>						
Unprocessed .. ..	3,391	4,011	3,961	0.5	0.4	0.5
Processed .. ..	1,554	1,635	1,789	0.2	0.2	0.2
Total .. ..	4,945	5,646	5,750	0.7	0.6	0.7
<b>Forestry—</b>						
Unprocessed .. ..	333	963	447	(b)	0.1	0.1
Processed .. ..	2,739	3,167	3,932	0.4	0.3	0.5
Total .. ..	3,072	4,130	4,379	0.4	0.4	0.6
<b>Total Primary Produce—</b>						
Unprocessed .. ..	459,866	613,924	478,283	60.5	63.6	59.9
Processed .. ..	235,670	255,373	220,908	31.0	26.5	27.7
Total .. ..	695,536	869,297	699,191	91.5	90.1	87.6
<b>Manufactures .. ..</b>	45,659	73,969	73,070	6.0	7.7	9.2
<b>Refined Petroleum Oils .. ..</b>	7,272	10,097	15,385	1.0	1.0	1.9
<b>Unclassified .. ..</b>	11,300	11,654	10,360	1.5	1.2	1.3
<b>Total Australian Produce (excluding Gold) .. ..</b>	759,767	965,017	798,006	100.0	100.0	100.0
<b>Re-exports (excluding Gold) .. ..</b>	13,774	13,662	14,793	..	..	..
<b>Gold Exports(a) .. ..</b>	8,323	14,227	6,352	..	..	..
<b>Total Recorded Value of Exports .. ..</b>	781,864	992,906	819,151	..	..	..

(a) The value of refined newly-won gold was £16,192,638 in 1955-56, £16,599,179 in 1956-57 and £17,301,072 in 1957-58. (b) Less than 0.05 per cent.

2. **Relative Importance of Industrial Groups.**—In the year 1957-58, Australian produce (other than gold) exported amounted to approximately £798 million. Of this, £699 million or 88 per cent. was mainly produce of primary industries, comprising £478 million of unprocessed produce and £221 million of goods which had been processed in some degree before export. The values of the principal individual items of processed primary produce exported were:—Raw sugar, £34,996,000; flour, etc., £15,059,000; canned fruit, £12,357,000; dried fruit, £9,142,000; wool (scoured, tops, etc.), £47,888,000; canned meats, £15,100,000; butter, £15,639,000; milk (condensed, dried, etc.), £10,508,000; pig lead, £15,820,000; lead bullion, £5,582,000; zinc bars, blocks, etc., £2,624,000; copper ingots, £3,194,000; and undressed timber, £3,515,000.

The value of manufactures exported as classified above was £73 million, or approximately 9 per cent. of Australian produce (other than gold) exported in 1957-58. The values of principal individual items here included were:—Manufactures of metal, £39,294,000; implements and machinery, £9,635,000; drugs and chemicals, £5,349,000; and paper and stationery, £2,828,000.

The items enumerated indicate the arbitrariness of the line necessarily drawn between primary produce and manufactures in any classification of this kind. The value of processed

primary products exported includes some element of value added by the simpler processes of manufacture, while the value shown for manufactures exported necessarily includes the value of raw materials (primary produce) used in those manufactures.

Refined petroleum oils exported are shown separately, as they consist of imported crude oils refined in Australia and re-exported in the refined form. The values of principal individual items shown as "unclassified" in 1957-58 were:—Individual consignments of less than £50 in value, £4,475,000; and military equipment and stores and supplies for Australian projects overseas, £3,335,000.

## § 15. Australian Index of Export Prices.

1. **General.**—Over the past fifty years the exports of Australia have become increasingly diversified, but, although the proportion of highly manufactured exports has increased, it is still small in relation to total exports. Most of the exports still consist of basic products, such as wool, wheat, butter, etc.

2. **Historical.**—An annual index of export prices has been published by this Bureau since its inception.

The first index was compiled annually for the years 1901 to 1916-17. The method of computation was to select all those articles of export which were recorded by units of quantity, and to apply to the quantities of these export commodities actually exported during any year the average price per unit ruling in the year 1901 (adopted as the base year). The total value so obtained was divided into the total actual (recorded) value of these exports for that year. The quotient (multiplied by 1,000) thus obtained was the export price index number for that year.

The method was changed in 1918. A weight for all principal exports was calculated on the average quantities of exports for the nineteen and a half years from 1st January, 1897 to 30th June, 1916. To these weights were applied the "average unit export values" of each export in successive years, and a weighted aggregative index of "price" variations was derived. It was published for the years 1897 to 1929-30, and particulars of this index were last published in Official Year Book No. 24, page 147.

After the 1914-18 War, however, the relative importance of different exports changed considerably. In addition, the pattern of exports varied considerably from year to year.

3. **Present Indexes.**—For the reasons just mentioned, two new series of monthly export price indexes—one using fixed weights and the other using changing weights—were published in 1937, computed back to 1928. These are the only export price indexes now published.

The data on which both series are based differ from those utilized in the old series of annual index numbers. The most important change was the use of actual (or calculated) export parities, based on actual price quotations, in place of the "unit-values" declared at the Customs.

The old index took no account of gold exports. The omission is natural and reasonable for countries which produce little or no gold. For gold-producing countries, although some exports of gold would be irrelevant (e.g., the Australian shipments of gold reserves during the depression), the exports of newly-produced gold should be taken into account. In the new series, therefore, gold is included, but the weight given to it is not the quantity exported but the quantity produced.

The two series are compiled monthly, and both relate to commodities which normally constitute about 80 per cent. of the total value of exports of merchandise and silver, together with gold production.

4. **Monthly Index (Fixed Weights).**—(i) *General.* This is a weighted aggregative index of price variations. It was computed back to 1928, with that year taken as base. It is now usually published on the base: Average of three years ended June, 1939 = 100.

The purpose of this index is to provide comparisons, over a limited number of years, of the level of prices of those commodities normally exported from Australia, making no allowance for any benefit or disadvantage accruing from variations during the period in the relative proportions of the different kinds of exports.

(ii) *Weights.* The original weights (used for the period 1928 to 1936) were, in round figures, the average annual exports (production, in the case of gold) during the five years 1928-29 to 1932-33.

From July, 1936, the weights were revised, and are now based on the average annual exports (production, in the case of gold) during the three years 1933-34 to 1935-36. The break of continuity has been bridged by the usual method of splicing. Consideration is being given to adopting weights for a post-war period.

The weight adopted for wheat takes into account the wheat equivalent of flour exported, the weight allotted to greasy wool takes account of the greasy equivalent of scoured wool, tops, and wool on skins, whilst for some metals allowance is made for the metallic content of ores and concentrates exported.

The twenty items, together with the units of quantity and the weights or "quantity multipliers", are given in the following table.

**EXPORT PRICE INDEX : COMMODITIES AND WEIGHTING SYSTEM.**  
(FROM 1ST JULY, 1936.)

Item.	Unit of Quantity.	"Quantity Multipliers" (Weights).	Percentage Distribution of Total Aggregate.			
			Base Period (1936-37 to 1938-39).		1957-58.	
			Excluding Gold.	Including Gold.	Excluding Gold.	Including Gold.
Wool .. ..	lb.	975,000,000	49.05	45.63	57.69	55.83
Wheat (a) .. ..	bushel	101,000,000	18.34	17.06	16.36	15.84
Butter .. ..	cwt.	2,140,000	12.21	11.36	6.66	6.44
<b>Metals—</b>						
Silver .. ..	oz.	7,300,000	0.68	0.64	} 7.30	} 7.06
(standard)						
Copper .. ..	ton	3,600	0.20	0.20		
Tin .. ..	"	1,300	0.31	0.28		
Zinc .. ..	"	99,000	2.05	1.90		
Lead .. ..	"	208,500	4.10	3.81		
<b>Meats—</b>						
Beef .. ..	lb.	182,000,000	2.56	2.38	} 5.92	} 5.74
Lamb .. ..	"	138,000,000	3.56	3.31		
Mutton .. ..	"	44,000,000	0.58	0.54		
Pork .. ..	"	16,000,000	0.43	0.40		
Sugar .. ..	ton	305,000	2.58	2.40	3.36	3.25
<b>Dried Fruit—</b>						
Sultanas .. ..	"	38,200	1.45	1.35	} 1.65	} 1.59
Raisins .. ..	"	3,000	0.12	0.11		
Currants .. ..	"	13,400	0.37	0.35		
Tallow .. ..	cwt.	600,000	0.69	0.64	0.63	0.61
<b>Hides—</b>						
Cattle .. ..	lb.	28,000,000	0.64	0.59	} 0.43	} 0.41
Calf .. ..	"	1,800,000	0.08	0.07		
Gold .. ..	fine oz.	937,000	..	6.98	..	3.23
			100.00	100.00	100.00	100.00

(a) Includes "wheat equivalent" of flour.

The percentage distributions of the "Total Aggregate" shown in the foregoing table are of importance, firstly, as showing their variations from time to time as the result of differential price movements as between the various commodities, and secondly, as regards the effect on the indexes as a whole of the percentage price variations in each commodity.

(iii) *Prices.* The adoption of current market prices (as distinct from the former average unit export values) in the present indexes permitted the use of standards for each commodity. All export parities are calculated from price quotations from the most reliable and representative sources available. In most cases, the prices used are those at which current sales are being effected.

(iv) *Index Numbers.* The following table shows export price index numbers for Australia for individual commodities, groups of commodities, and all groups combined for each financial year from 1936-37 to 1957-58 and monthly from July, 1957 to December, 1958.

EXPORT PRICE INDEXES : AUSTRALIA.

SIMPLE AGGREGATIVE INDEX : FIXED WEIGHTS.

INDIVIDUAL COMMODITIES, GROUPS OF COMMODITIES, AND ALL GROUPS COMBINED.

(Base of each Index: Average of three years ended June, 1939 = 100.)

Period.	Wool.	Wheat.	Butter.	Metals. (a)	Meats. (b)	Sugar.	Dried Fruits. (c)	Tallow.	Hides. (d)	Gold.	All Groups.	
											Ex- cluding Gold.	In- cluding Gold.
Percentage Dis- tribution of Base Aggregate—												
(e) ..	45.63	17.06	11.36	6.83	6.63	2.40	1.81	0.64	0.66	6.98	..	100.00
(f) ..	49.05	18.34	12.21	7.34	7.13	2.58	1.94	0.69	0.72	..	100.00	..
1936-37 ..	122	123	92	120	98	104	103	122	113	99	116	115
1937-38 ..	99	111	107	96	106	92	103	100	100	98	102	102
1938-39 ..	79	66	101	84	96	104	94	78	87	103	82	83
1939-40 ..	98	82	108	92	102	126	94	76	120	118	96	98
1940-41 ..	101	102	110	95	103	137	95	82	98	121	103	104
1941-42 ..	101	105	110	101	109	137	106	114	133	120	105	106
1942-43 ..	117	106	114	100	112	152	112	119	145	119	114	114
1943-44 ..	117	116	114	113	113	159	121	123	151	119	117	117
1944-45 ..	117	154	147	129	122	172	128	151	147	120	130	130
1945-46 ..	117	213	147	196	123	213	137	161	152	122	148	146
1946-47 ..	173	305	173	308	139	264	152	361	334	122	209	203
1947-48 ..	287	420	193	372	146	320	157	436	364	122	296	283
1948-49 ..	365	413	233	478	171	343	162	499	421	122	348	332
1949-50 ..	473	400	250	421	196	369	176	400	479	164	399	383
1950-51 ..	999	432	271	689	209	410	226	356	752	176	690	654
1951-52 ..	564	436	291	811	263	464	302	451	486	184	495	473
1952-53 ..	616	445	313	504	314	501	297	358	369	186	505	483
1953-54 ..	615	411	325	450	338	479	287	321	336	179	496	474
1954-55 ..	538	357	313	511	344	445	267	349	218	178	450	431
1955-56 ..	464	324	320	562	355	450	286	353	238	178	414	397
1956-57 ..	578	327	250	545	368	501	319	357	240	178	464	444
1957-58 ..	471	357	218	398	333	518	341	368	240	178	400	385
1957-58—												
July ..	(g) 596	331	278	445	351	577	328	347	240	178	470	450
August ..	551	342	274	448	345	622	328	357	239	178	450	431
September ..	543	344	274	441	333	571	333	364	242	178	445	426
October ..	498	350	257	423	337	541	337	362	236	178	420	403
November ..	483	352	232	409	337	488	344	364	244	178	407	391
December ..	445	359	225	372	290	481	346	365	243	178	383	369
January ..	453	363	207	369	315	504	345	376	237	178	387	373
February ..	468	368	194	375	294	496	349	379	239	178	393	378
March ..	422	371	188	375	308	496	346	380	239	178	372	358
April ..	400	365	163	370	353	479	346	368	235	178	358	346
May ..	392	367	162	369	364	485	339	373	241	178	356	344
June ..	400	369	166	377	368	477	347	375	239	178	361	348
1958-59—												
July ..	(g) 400	366	178	371	351	481	351	384	228	178	361	348
August ..	354	369	190	369	370	477	363	375	234	178	342	330
September ..	354	363	190	372	393	476	370	383	250	178	343	332
October ..	336	363	195	391	389	473	385	382	270	178	336	325
November ..	339	355	222	404	373	473	390	378	273	178	339	328
December ..	328	(i) 353	242	389	(h)	470	391	375	285	178	(i) 334	(i) 323

(a) Silver, copper, tin, zinc, lead. (b) Beef, lamb, mutton, pork. Guaranteed minimum prices are used when operative. (c) Sultanas, raisins, currants. (d) Cattle hides, calf skins. (e) For "All Groups (including Gold)"—applicable from 1936-37. (f) For "All Groups (excluding Gold)"—applicable from 1936-37. (g) Nominal. (h) Actual prices realized not yet fully-known; provisional prices included in "All Groups" Indexes. (i) Preliminary.

A graph showing index numbers for All Groups (including Gold) appears on page 474.

Reference to the group indexes in the table above shows the great fluctuations and the wide dispersion of prices of export commodities in recent years. In particular, very great movements upwards and downwards have occurred in the price of wool. Since wool is a predominant export and comprises 46 per cent. of the base aggregate of the index, fluctuations in wool prices obscure the effects which movements in prices of the other components have on the All Groups index. For purposes of comparison, wool and "other groups" are shown separately below.

## EXPORT PRICE INDEX: WOOL AND "OTHER GROUPS", AUSTRALIA.

(Base of each Index: Average of three years ended June, 1939 = 100.)

Period.	Wool.	Other Groups.	All Groups.	Period.	Wool.	Other Groups.	All Groups.
1945-46 ..	117	171	146	1955-56—			
1946-47 ..	173	228	203	July .. (a)	505	347	419
1947-48 ..	287	280	283	August ..	453	347	395
1948-49 ..	365	305	332	September ..	437	347	388
1949-50 ..	473	308	383	October ..	437	351	390
1950-51 ..	999	365	654	November ..	437	352	391
1951-52 ..	564	397	473	December ..	453	352	398
1952-53 ..	616	371	483	January ..	460	349	400
1953-54 ..	615	356	474	February ..	460	340	395
1954-55 ..	538	342	431	March ..	453	335	388
1955-56 ..	464	342	397	April ..	468	325	390
1956-57 ..	578	331	444	May ..	498	323	403
1957-58 ..	471	313	385	June .. (a)	505	331	411
1952-53—				1956-57—			
July .. (a)	566	381	465	July ..	490	330	403
August .. (a)	566	380	465	August ..	520	330	417
September ..	551	379	457	September ..	566	336	441
October ..	588	370	469	October ..	551	332	432
November ..	588	368	469	November ..	581	331	445
December ..	618	376	486	December ..	588	329	447
January ..	618	376	486	January ..	596	330	451
February ..	626	371	487	February ..	611	330	458
March ..	656	369	500	March ..	596	329	451
April ..	671	363	503	April ..	618	331	462
May ..	701	361	516	May ..	626	333	467
June ..	641	363	490	June ..	596	332	452
1953-54—				1957-58—			
July .. (a)	641	369	493	July .. (a)	596	327	450
August .. (a)	634	367	488	August ..	551	331	431
September ..	626	365	484	September ..	543	328	426
October ..	634	363	486	October ..	498	323	403
November ..	634	360	485	November ..	483	315	391
December ..	611	358	473	December ..	445	305	369
January ..	603	354	468	January ..	453	306	373
February ..	581	350	455	February ..	468	303	378
March ..	581	351	456	March ..	422	304	358
April .. (a)	596	348	461	April ..	400	301	346
May ..	618	346	470	May ..	392	303	344
June ..	622	346	472	June ..	400	306	348
1954-55—				1958-59—			
July .. (a)	622	338	468	July .. (a)	400	304	348
August ..	566	338	442	August ..	354	310	330
September ..	566	339	442	September ..	354	312	332
October ..	536	344	431	October ..	336	316	325
November ..	513	343	421	November ..	339	319	328
December ..	532	348	432	December ..	328 (b)	320 (b)	323 (b)
January ..	520	345	425				
February ..	528	342	427				
March ..	528	341	426				
April ..	520	340	422				
May ..	520	340	422				
June ..	505	343	417				

(a) Nominal.

(b) Preliminary.

5. Monthly Index (Changing Weights).—This series was designed for shorter period comparisons—from one or more months of the current year to the corresponding months of the previous year. The fixed weights index numbers indicate satisfactorily the general

trend of export prices, but take no account of the relative quantities actually sold at the prices ruling during a month. The changing weights index numbers, shown below, take account of this factor. In computing these, the "quantity multipliers" are the quantities actually exported in the months (or periods) to which the index numbers relate.

For any given month, the procedure is to multiply the price of each commodity in that month, and its price in the corresponding month of the previous year, by the quantity exported during the given month. A comparison of the resulting aggregates gives one possible measure of the change in prices over the period, i.e., the change assuming that the proportions of the different kinds of exports whose prices are to be measured were the same as their proportions in the given month. Another possible measure is given by assuming that the proportions of the different kinds of exports in the given month were the same as their proportions in the corresponding month of the previous year. Accordingly, the first step in the procedure is repeated, substituting the quantities exported during the corresponding month of the previous year.

The index numbers so obtained have been proved over a period of years to lie very close together. As it is convenient for practical reasons to have one single figure rather than two close alternatives, the two index numbers are multiplied together and the square root of the product extracted. This is taken to be the index number for the month, the prices of the corresponding month of the previous year being taken as base.

The index numbers for the whole or portion of a year, as compared with the corresponding period of the previous year, are computed in very much the same way. The process involves merely the cumulative addition of the aggregates computed for the individual months, and extraction of the index numbers as explained above.

Index numbers computed on this basis are shown in the following table for the months July, 1957 to December, 1958 and for trade year periods ending in those months:—

**MONTHLY EXPORT PRICE INDEX (CHANGING WEIGHTS) : AUSTRALIA.**

(Base: Weighted Average Price Level in corresponding months (or periods) of preceding year = 100.)

Month.	Month stated compared with same month of preceding year.		Period of trade year ending in month stated compared with same period of preceding year.	
	Excluding Wool.	Including Wool.(a)	Excluding Wool.	Including Wool.(a)
1957-58—				
July .. .. .	95	97	95	97
August .. .. .	103	104	99	101
September .. .. .	100	97	99	99
October .. .. .	98	93	99	97
November .. .. .	94	86	98	94
December .. .. .	90	80	97	92
January .. .. .	86	79	96	90
February .. .. .	88	79	95	88
March .. .. .	89	75	94	87
April .. .. .	84	72	94	86
May .. .. .	89	69	93	84
June .. .. .	96	74	93	83
1958-59—				
July .. .. .	93	90	93	90
August .. .. .	93	80	93	83
September .. .. .	97	76	95	79
October .. .. .	99	77	96	79
November .. .. .	104	80	97	79
December .. .. .	(b) 110	(b) 86	(b) 99	(b) 80

(a) For certain months a nominal price is used for wool as indicated in the preceding two tables.  
 (b) Preliminary.

Monthly export price index numbers are issued in the mimeographed publication *Monthly Index of Australian Export Prices*, in the *Monthly Review of Business Statistics* and in the *Quarterly Summary of Australian Statistics*.

### § 16. External Trade of Australia and other Countries.

1. **Essentials of Comparison.**—Direct comparison of the external trade of any two countries is possible only when the general conditions prevailing therein, and the system of record, are more or less identical. For example, in regard to the mere matter of record, it may be observed that in one country the value of imports may be the value at the port of shipment, while in another the cost of freight, insurance and charges may be added thereto. Again, the values of imports and exports in one may be declared by merchants, whereas in another they may be the official prices fixed from time to time by a commission constituted for the purpose. In later years, moreover, a very substantial difference in the value of imports would result from the different methods of converting the moneys of foreign countries, i.e., from the application of current rates of exchange or of the mint par. Lastly, the figures relating to the external trade of any country are also affected in varying degree by the extent to which they include transit or re-export trade. This class of trade represents a much greater proportion of the trade of Switzerland and Belgium than that of other countries. France and the United Kingdom also re-export largely, whereas in Canada, Australia and New Zealand the same class of trade represents a comparatively small proportion of the total.

2. **"Special Trade" of Various Countries.**—In the following table the figures, which are expressed in Australian currency, relate as nearly as possible to imports cleared for consumption in the various countries specified and to exports of their domestic products. It is to be noted, however, that these figures do not invariably denote the same thing throughout, since, in the United Kingdom and other manufacturing countries, raw or partly manufactured materials are imported as for home consumption and, after undergoing some process of manufacture or further modification, are re-exported as domestic production. Nevertheless, a comparison of this character reveals approximately the extent of the external trade which otherwise would not be manifest. The countries listed below are not necessarily all the important trading countries of the world, but those important countries for which comparable statistics are available.

#### IMPORTS CLEARED FOR HOME CONSUMPTION, AND EXPORTS OF DOMESTIC PRODUCTS (MERCHANDISE ONLY<sup>(a)</sup>): VARIOUS COUNTRIES, 1957.

Country.	Trade. (£A. Million.)			Trade per Head of Population.(£A.)		
	Imports Cleared. c.i.f.	Exports. f.o.b.	Total.	Imports Cleared.	Exports.	Total.
United States of America	b 5,838.8	9,215.2	15,054.0	34.1	53.8	87.9
United Kingdom ..	c 4,927.7	4,156.3	9,084.0	95.8	80.8	176.6
Germany, Federal Republic of .. ..	3,347.8	3,828.1	7,175.9	65.0	74.4	139.4
Canada .. ..	b 2,619.2	2,297.3	4,916.5	157.9	138.5	296.4
France .. ..	2,727.7	2,261.1	4,988.8	61.9	51.3	113.2
Netherlands .. ..	1,832.6	1,382.6	3,215.2	166.3	125.5	291.8
Belgium-Luxemburg .. ..	1,532.1	1,422.3	2,954.4	170.4	158.2	328.6
Japan .. ..	d 1,912.5	1,275.9	3,188.4	21.0	14.1	35.1
Italy .. ..	1,618.8	1,133.9	2,752.7	33.4	23.4	56.8
Sweden .. ..	1,083.9	954.0	2,037.9	147.1	129.5	276.6
Australia <sup>(e)</sup> .. ..	(b) 776.0	798.0	1,574.0	79.6	81.9	161.5
Switzerland .. ..	876.8	696.4	1,573.2	171.4	136.1	307.5
Denmark .. ..	606.7	524.1	1,130.8	134.8	116.5	251.3
Norway .. ..	568.8	367.0	935.8	162.8	105.0	267.8
Austria .. ..	503.6	437.1	940.7	72.0	62.5	134.5
Indonesia .. ..	355.8	432.6	788.4	4.2	5.1	9.3
Spain .. ..	384.8	212.5	597.3	13.1	7.2	20.3
Egypt .. ..	233.9	220.1	454.0	9.7	9.2	18.9
Chile .. ..	196.9	204.9	401.8	27.7	28.8	56.5
Turkey .. ..	177.2	154.0	331.2	6.9	6.1	13.0
Greece .. ..	234.4	98.2	332.6	29.0	12.1	41.1

(a) Includes silver. (b) f.o.b. (c) Covers goods imported less goods re-exported.  
 (d) Covers goods imported as distinct from goods cleared for home consumption. (e) Year ended June, 1958.

### § 17. Oversea Trade in Calendar Years.

For the purpose of comparison with countries which record overseas trade in calendar years, the following table has been compiled to show Australian imports and exports for each of the calendar years 1954 to 1958.

**OVERSEA TRADE IN CALENDAR YEARS : AUSTRALIA.**  
(£'000.)

Year.	Merchandise.		Bullion and Specie.		Total.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
1954 .. ..	751,949	736,301	3,341	12,127	755,290	748,428
1955 .. ..	862,547	777,640	2,480	20,320	865,027	797,960
1956 .. ..	764,597	823,422	3,235	22,236	767,832	845,658
1957 .. ..	751,543	981,694	2,509	13,891	754,052	995,585
1958(a) .. ..	800,071	736,857	2,632	4,083	802,703	740,940

(a) Subject to revision.

**§ 18. Excise.**

Although excise goods have no immediate bearing on overseas trade, the rate of excise duty is in some cases related to the import duty on similar goods. Moreover, as the Excise Acts are administered by the Department of Customs and Excise, it is convenient to publish here the quantities of Australian produce on which excise duty has been paid. Particulars of Customs and Excise revenue are shown in Chapter XXI.—Public Finance. The following table shows the quantities of spirits, beer, tobacco, etc., on which excise duty was paid in Australia during the years 1956–57 and 1957–58.

**QUANTITY OF SPIRITS, BEER, TOBACCO, ETC., ON WHICH EXCISE DUTY WAS PAID : AUSTRALIA.**

Article.	1956–57.	1957–58.	Article.	1956–57.	1957–58.
	proof gallons.	proof gallons.		lb.	lb.
			Tobacco .. ..	18,801,253	18,109,744
			Snuff .. ..	485	535
Spirits—			Cigars—		
Brandy .. ..	669,681	702,745	Hand-made .. ..	22,422	19,571
Gin .. ..	346,641	353,957	Machine-made .. ..	94,401	99,000
Whisky .. ..	406,825	403,526	Total Cigars .. ..	116,823	118,571
Rum .. ..	569,282	513,111	Cigarettes—		
Liqueurs .. ..	71,540	57,854	Hand-made .. ..	30,035,376	32,185,864
Other .. ..	36	17,989	Machine-made .. ..		
Total Spirits (Potable) .. ..	2,064,005	2,049,182	Total Cigarettes .. ..	30,035,376	32,185,864
				60 papers or tubes.	60 papers or tubes.
Spirits for—			Cigarette Papers and Tubes .. ..	124,806,584	118,240,926
Fortifying Wine .. ..	2,197,125	2,219,771		tons.	tons.
Industrial or Scientific purposes .. ..	215,890	234,544	Coal .. ..	17,979,780	17,691,705
Manufacture of—				gross boxes.	gross boxes.
Essences .. ..	147,649	148,848	Matches .. ..	3,306,858	3,337,788
Scents and Toilet Preparations .. ..	20,059	20,393		gallons.	gallons.
Vinegar .. ..	135,230	139,711	Petrol .. ..	780,121,025	871,265,708
Beer .. ..	gallons.	gallons.		doz. packs.	doz. packs.
	210,600,580	215,637,916	Playing Cards .. ..	96,200	93,650

**§ 19. Interstate Trade.**

Prior to the federation of the Australian Colonies (now States), each Colony published statistics of its trade with the other Colonies. A similar record was continued by the Commonwealth Government under the provisions of the Constitution (section 93). On the expiry of the "book-keeping" period, these records were discontinued as from 13th September, 1910, and the last published statements were for the year 1909. Later, the

Governments of Western Australia and Tasmania revived the records, and relevant statistics are available again for those States. A detailed collection for Queensland was re-introduced from July, 1953.

At the Conference of Statisticians held in January, 1928 it was resolved that efforts should be made in other States to record the interstate movement of certain principal commodities.

Interstate trade statistics are now published in detail for Queensland, Western Australia and Tasmania, prepared by the Deputy Commonwealth Statisticians in those States. The Deputy Commonwealth Statistician in South Australia publishes some figures for that State, made up from the records of Western Australia and Tasmania. The statistics of interstate trade for New South Wales and Victoria are very meagre. The Melbourne Harbor Trust publishes, in its annual report, the quantities of various commodities of interstate trade loaded and discharged in the Port of Melbourne. The trade with individual States is not disclosed.

## § 20. The Australian Balance of Payments.

1. **Introduction.**—Defining the balance of payments, the International Monetary Fund, in the second edition of its *Balance of Payments Manual* states “[It] . . . is a systematic record of all economic transactions during the period between residents of [a] country and residents of other countries.” In a broad sense, therefore, statistics of the balance of payments summarize in money terms the economic relations existing between a national economy and the rest of the world, and are a pre-requisite to any attempt to examine the influence of external factors on the domestic economy.

The Australian economy is subject to large fluctuations in the level of export income and is affected in important respects by movements of oversea capital. As a result, balance of payments estimates have always assumed a particular importance in Australia. Between 1948–49 and 1957–58, for example, the value of exports was equivalent to 22 per cent. of national income, fluctuating between 31 per cent. of national income in 1950–51, the year of record wool prices, and 17 per cent. in 1957–58, a year of relatively low wool prices.

Official balance of payments estimates for Australia were first published for the years 1928–29 to 1930–31 as an appendix to Official Year Book No. 24. Prior to that the only estimates published by this Bureau related to the balance of trade, with some reference to international transactions. Since 1930–31, estimates of the balance of payments have been published each year, except during the war period 1939 to 1945. From the first half of the year 1954–55, statistics of the balance of payments have been issued twice yearly in the mimeographed publication *The Australian Balance of Payments*. This, together with a printed volume *The Australian Balance of Payments, 1928–29 to 1951–52* provides: (i) a description of the various items included in the official estimates, (ii) an indication of the sources from which the estimates are derived, and (iii) an explanation of the methods used in making them. The following paragraphs contain a brief description of the concepts adopted and a summary of the transactions for the years 1955–56 to 1957–58.

The form of the Australian balance of payments closely follows the pattern set out by the International Monetary Fund for the presentation of balance of payments statistics, although modifications have been introduced to accord with Australian conditions.

In the definitions adopted by the International Monetary Fund a basic distinction is drawn between “current” transactions and “capital” transactions. Current transactions consist of all transactions involving the transfer of ownership of goods or the rendering of services between residents of one country and residents of another country. Also included are items such as donations, reparations, etc. Capital transactions consist of all transactions involving the transfer of money, claims to money, and titles to investments, between residents of one country and those of another country.

This distinction is maintained in the Australian balance of payments accounts. Thus, transactions involving the transfer of the ownership of goods, i.e., imports and exports, and services, such as freight and insurance, investment income, etc. (customarily termed “invisibles”), are included in current account, while predominantly financial transactions are included in capital account.

By definition, and because of the method of constructing the accounts, the balance of payments on current account is always equivalent to the balance on capital account. In practice, however, there are “errors and omissions” in the estimates, including those which originate from factors such as the interval in time between the shipment of exports and the receipt of payment from overseas, and between the arrival of imports and the making of payment overseas. These cause discrepancies which are provided for by introducing a “balancing item” into the capital account. (See item 14 in the table on page 499).

2. Current Account.—The balance of payments on current account is constructed in the form of a series of credit and debit entries, the former comprising all transactions which result in receipts of foreign exchange and the latter all those resulting in payments in foreign exchange.

Within the current account the most important single relationship is the balance of trade—the difference between the value of exports and the value of imports as adjusted for balance of payments purposes. The balance of trade showed a deficit of £47.2 million in 1955-56 and surpluses of £260.6 million in 1956-57 and £23.2 million in 1957-58.

**BALANCE OF PAYMENTS ON CURRENT ACCOUNT : AUSTRALIA.**  
(£A. million.)

Particulars.	1955-56.	1956-57.	1957-58.(a)
<b>CREDITS.</b>			
1. Exports f.o.b. .. .. .	772.3	978.1	813.7
2. Gold Production(b) .. .. .	15.6	16.0	17.2
3. Transportation—			
Expenditure of Oversea ships .. .. .	59.1	68.0	66.8
Other .. .. .	6.6	8.0	8.5
	65.7	76.0	75.3
4. Travel .. .. .	6.1	9.0	7.5
5. Income from Investment—			
Undistributed Income .. .. .	2.9	3.3	4.0
Other .. .. .	18.5	22.5	30.5
	21.4	25.8	34.5
6. Government .. .. .	9.5	15.7	11.8
7. Miscellaneous .. .. .	9.5	7.5	7.5
8. Donations, etc.—			
Immigrants' Funds, etc. .. .. .	14.2	16.1	17.4
Other .. .. .	5.2	6.3	5.5
	19.4	22.4	22.9
<i>Total Credits</i> .. .. .	919.5	1,150.5	990.4
<b>DEBITS.</b>			
9. Imports f.o.b. .. .. .	819.5	717.5	790.5
10. Transportation—			
Freight .. .. .	103.0	110.0	123.0
Other (incl. Marine Insurance)(c)	18.0	14.3	16.4
	121.0	124.3	139.4
11. Travel .. .. .	22.3	22.2	27.5
12. Income from Investment—			
Public Authority Interest .. .. .	22.3	22.7	22.9
Portfolio Investment .. .. .	6.0	8.0	9.0
Direct Investment .. .. .	38.8	37.7	42.0
Undistributed Income .. .. .	39.9	44.7	45.0
	107.0	113.1	118.9
13. Government—			
Defence .. .. .	11.5	4.4	5.7
Papua and New Guinea .. .. .	11.0	11.5	13.2
Other .. .. .	13.3	12.4	15.0
	35.8	28.3	33.9
14. Miscellaneous .. .. .	22.7	21.3	27.0
15. Donations, etc.—			
Personal .. .. .	16.5	18.2	17.0
Colombo Plan, etc. .. .. .	4.0	4.5	5.0
Other .. .. .	7.8	8.5	8.8
	28.3	31.2	30.8
<i>Total Debits</i> .. .. .	1,156.6	1,057.9	1,168.0
<b>Balance on Current Account</b>	-237.1	+92.6	-177.6

(a) Preliminary. For revised figures see Appendix. (b) Includes gold sold on the premium market valued at the price obtained. (c) Total marine insurance premiums payable on Australian imports (whether payable in Australia or overseas) were £4.2 million in 1955-56, £3.7 million in 1956-57 and £4.2 million in 1957-58.

When invisible transactions are taken into consideration, the current account deficit in 1955-56 was considerably greater than the trade deficit in that year, while the trade surplus in 1956-57 was greatly reduced. In 1957-58, the effect of including invisible transactions was to change a small surplus in the trade balance into a substantial deficit on all current account transactions. In 1955-56, there was a deficit in the balance on current account of £237.1 million, in 1956-57 a surplus of £92.6 million and in 1957-58 another deficit of £177.6 million. The most important of the invisible transactions are the transportation items, which appear in both debits and credits. The principal component on the debit side is freight payable overseas—mainly freight on imports into Australia (£103 million in 1955-56, £110 million in 1956-57 and £123 million in 1957-58)—and on the credit side, expenditure of overseas ships in Australian ports (£59.1 million in 1955-56, £68 million in 1956-57 and £66.8 million in 1957-58).

The item next in importance after the transportation items is "Income from investment". The debit entries under this item represent the payment of interest and dividends overseas, while the credit entries represent the receipt of interest and dividends by Australian residents. The item also includes undistributed income, for which, since no actual monetary payment is involved, a compensating entry showing an increase in the value of capital investment is made in capital account. Investment income debits were £107.0 million in 1955-56, £113.1 million in 1956-57 and £118.9 million in 1957-58. Credits in the same periods were £21.4 million, £25.8 million and £34.5 million respectively.

The remaining items are much smaller than these two groups. Government transactions debits in these years were in the vicinity of £30-35 million each year and credits were about £10-15 million. Debits on account of donations etc., were about £30 million, with credits of approximately £20 million a year.

One item of some conceptual importance is the total Australian gold production (less industrial absorption), which is shown as a credit entry. The view taken is that Australian gold production constitutes an immediate addition to Australia's international reserves, and an entry covering the item is included in current account. At the same time total exports are adjusted to exclude gold.

**3. Capital Account.**—The capital account shows the annual movements in items which are regarded as Australian overseas assets and those which are regarded as Australian overseas liabilities.

On the assets side, by far the most important item is Australia's holdings of monetary gold and foreign exchange—the international reserves. International reserves decreased by £73.3 million in 1955-56, increased by £211.5 million in 1956-57 and decreased by £42.0 million in 1957-58.

On the liabilities side, the most important items are public authority debt and direct investment in Australian companies.

In recent years the principal component of public authority debt has been the movement in net borrowing from the International Bank for Reconstruction and Development, from which £17.9 million net of repayments was received in 1955-56, £3.1 million in 1956-57 and £13.2 million in 1957-58. Private investment in Australia, however, has been much greater. Including undistributed income, identified investment in Australian companies (excluding life offices) was £117.5 million in 1955-56 and £97.9 million in 1956-57.

Since, as mentioned above, the balance on capital account is identical with the balance on current account, the movement in international reserves should reflect the combined movement of current and capital items. In practice there is always an unexplained residue which is included in the table below as the balancing item.

## BALANCE OF PAYMENTS ON CAPITAL ACCOUNT : AUSTRALIA.

(£A. million.)

Particulars.	1955-56.	1956-57.	1957-58.(a)
CHANGE IN ASSETS.			
1. Gold and Foreign Exchange .. ..	- 73.3	211.5	- 42.0
2. Subscriptions to I.M.F., I.B.R.D. and I.F.C. .. ..	.. ..	1.0	.. ..
3. Other Official Transactions .. ..	- 9.9	- 27.3	- 1.6
4. Marketing Authorities .. ..	9.3	- 4.4	- 2.7
5. Portfolio Investment .. ..	- 1.7	- 0.9	- 2.8
6. Direct Investment—			
Branches—Unremitted Profits .. ..	0.4	0.7	1.0
—Other .. ..	4.0	6.8	(b)
Subsidiaries—Undistributed Profits .. ..	2.5	2.6	3.0
—Other .. ..	1.6	0.8	(b)
<i>Total—Change in Assets</i> .. ..	<i>- 67.1</i>	<i>190.8</i>	<i>- 45.1</i>
CHANGE IN LIABILITIES.			
7. Official Loans—			
I.B.R.D. .. ..	17.9	3.1	13.2
Other Commonwealth .. ..	6.8	3.2	0.7
State .. ..	1.4	- 33.4	2.1
Other .. ..	- 0.3	- 3.2	- 3.6
Discounts and Bonuses .. ..	- 0.1	0.1	0.2
8. Other I.M.F. and I.B.R.D. .. ..	.. ..	- 1.0	- 3.1
9. Papua and New Guinea Adjustment .. ..	2.0	2.0	2.0
10. Australian Currency held by Foreign Banks .. ..	- 0.3	0.3	- 0.4
11. Portfolio Investment—			
Government Securities .. ..	- 4.0	- 1.4	(b)
Companies, etc. .. ..	7.2	11.1	(b)
12 Direct Investment—			
Branches—Unremitted Profits .. ..	6.6	7.5	8.0
—Other .. ..	12.5	8.3	(b)
Subsidiaries—Undistributed Profits .. ..	33.3	37.2	37.0
—Other .. ..	57.9	33.8	(b)
13. Life Assurance Offices .. ..	- 1.1	- 1.1	- 4.0
14. Balancing Item .. ..	30.2	31.7	80.4
<i>Total—Change in Liabilities</i> .. ..	<i>170.0</i>	<i>98.2</i>	<i>132.5</i>
<b>Balance on Capital Account</b> .. ..	<b>237.1</b>	<b>- 92.6</b>	<b>177.6</b>

(a) Preliminary. For revised figures see Appendix. (b) Not available, included in balancing item.

NOTE.—Minus sign (—) denotes decrease.

4. Regional Balance of Payments.—It is possible to make some dissection of the overall Australian balance of payments to show the balance of payments with various countries and monetary areas.

The tables shown below provide two such dissections. The first table provides a dissection of the balance of payments on current account for the main monetary areas in each of the years 1955-56 to 1957-58. The second table provides a more detailed dissection

of the dollar balance of payments during the same period and includes not only transactions with the dollar area but all transactions involving dollars, irrespective of where they were made.

5. **Balance of Payments on Current Account—Monetary Areas.**—It has not yet been found feasible to prepare complete estimates of the balance of payments with various countries, since sufficient information on capital movements to and from those countries is not available in the detail required. As a result, the estimates in the following table refer only to current account transactions.

The table shows the balance on current account in each of the years 1955–56 to 1957–58 for the sterling area, the dollar area and other non-sterling countries.

**BALANCE OF PAYMENTS ON CURRENT ACCOUNT WITH VARIOUS COUNTRIES AND MONETARY AREAS<sup>(a)</sup> : AUSTRALIA.**

(£A. million.)

Particulars.	Gold Production.	Sterling Area.		Dollar Area.			Other Non-sterling.		Total.
		United Kingdom.	Other.	U.S.A.	Canada.	Other.	O.E.E.C.	Rest of World. (b)	
<b>1955–56.</b>									
Exports f.o.b. ..	..	257.1	131.4	55.0	10.9	9.0	187.5	121.4	772.3
Imports f.o.b. ..	..	-355.3	-128.1	-98.7	-23.3	-4.4	-125.8	-83.9	-819.5
Invisibles (net) ..	15.6	-77.6	-31.7	-46.1	-11.5	-1.1	-15.0	-22.5	-189.9
Balance on Current Account ..	15.6	-175.8	-28.4	-89.8	-23.9	3.5	46.7	15.0	-237.1
		-204.2		-110.2			61.7		
<b>1956–57.</b>									
Exports f.o.b. ..	..	277.5	176.7	66.1	10.7	9.3	250.2	187.6	978.1
Imports f.o.b. ..	..	-295.9	-124.1	-97.0	-22.2	-4.8	-100.5	-73.0	-717.5
Invisibles (net) ..	16.0	-53.7	-31.7	-51.6	-9.7	0.8	-12.7	-23.8	-168.0
Balance on Current Account ..	16.0	-72.1	20.9	-82.5	-21.2	3.7	137.0	90.8	92.6
		-51.2		-100.0			227.8		
<b>1957–58.<sup>(c)</sup></b>									
Exports f.o.b. ..	..	220.4	159.7	45.5	14.1	10.8	201.2	162.0	813.7
Imports f.o.b. ..	..	-324.9	-124.9	-106.1	-23.0	-3.6	-114.9	-93.1	-790.5
Invisibles (net) ..	17.2	-62.2	-39.5	-59.1	-13.2	-0.6	-16.5	-26.9	-200.8
Balance on Current Account ..	17.2	-166.7	-4.7	-119.7	-22.1	6.6	69.8	42.0	-177.6
		-171.4		-135.2			111.8		

(a) For a list of the countries included in each monetary area see page 476.

(b) Includes international agencies.

(c) Preliminary. For revised figures see Appendix.

NOTE.—Minus sign (–) denotes debits ; other items are credits.

In recent years Australia has usually been in deficit on current account with the rest of the sterling area and with the dollar area, and in surplus with all other countries. This pattern can be seen in each of the years shown in the table. A deficit in the current account of £237.1 million in 1955–56 was followed by a surplus of £92.6 million in 1956–57 and

another deficit of £177.6 million in 1957-58. Considered on a regional basis, the surplus was due to a reduction in Australia's deficit with the rest of the sterling area and to an increase in her surplus with the "Other Non-sterling" countries. The balance on current account with the dollar area was higher in 1957-58 than in the two previous years; however, it was relatively stable in comparison with the magnitude of movement in other areas.

The table also shows some information as to the balance of payments with countries within each monetary area. The importance of the United Kingdom in Australia's international transactions is apparent, as also is the importance of other countries combined in the Organization for European Economic Co-operation. The increase in total value of exports to these countries in 1956-57 was largely responsible for the surplus noted above with "Other Non-sterling" countries in that year.

The dollar area is shown dissected into United States of America and Canada. However, the more detailed treatment of the balance of payments with the dollar area is set out in the table on page 502.

**6. Balance of Payments with the Dollar Area.**—The results of Australia's dollar transactions in the three years 1955-56 to 1957-58 are shown in the following table. As mentioned previously, the table shows in addition to transactions with the countries of the dollar area, all Australia's transactions which directly involve the receipt or payment of dollars, and includes the receipts of dollars under loans from the International Bank for Reconstruction and Development, payments of subscriptions to international agencies, etc.

The table has two main sections. The first section (items 1-9) provides details on current transactions. Item 8 is immediately comparable with the current account balance for the dollar area shown in the previous table and item 9 brings current dollar transactions outside the dollar area into account. The second section (items 10-16) brings in capital transactions of which items 10 to 12 comprise identified financing transactions, and items 13 to 15 relate to identified investment items.

Traditionally, Australia has always been in overall deficit in her balance of payments with the dollar area. Prior to the 1939-45 War, however, sterling was convertible into all other currencies and Australia's dollar deficits could be offset against her surpluses of other currencies. However, the emergence of the dollar as a scarce currency after the war and the loss of the convertibility of sterling have prevented the free working of such a system and Australia, in common with most other countries outside the dollar area, has been forced to exercise strict control over dollar transactions. Since the war, Australia, as a member of the sterling area, has purchased her net requirements of dollars from the Sterling Area Central Reserves, which the United Kingdom holds in her capacity as banker for the sterling area.

The table shows that after all direct dollar transactions—current and capital—have been taken into account, Australia purchased dollars from the United Kingdom to the extent of £40.2 million in 1955-56, £23.2 million in 1956-57, and £69.9 million in 1957-58, in order to finance the remaining dollar deficit. The reduction in 1956-57 resulted from the sale to the United Kingdom of £25 million of gold. This amount was offset against total drawings.

**7. Conclusion.**—Construction of the estimates of the Australian balance of payments involves the systematic assembly of much intricate data, from a variety of sources of which the following are the more important:—(i) Statistics of exports and imports, obtained in the first place from Australian trade statistics; (ii) information on particular invisible and capital items, obtained by regular inquiry from private organizations and government departments; (iii) details of many important receipts and payments of foreign exchange, provided by the banking system; (iv) information on dividends remitted, undistributed income and movements of private investment in companies, provided by statistics of oversea investment collected by this Bureau; and (v) information on international reserves, supplied by the Commonwealth Bank.

## BALANCE OF PAYMENTS WITH THE DOLLAR AREA : AUSTRALIA.

(£A. million.)

Particulars.	1955-56.	1956-57.	1957-58.(a)
CURRENT ACCOUNT.			
<i>Credits with Dollar Area—</i>			
1. Exports f.o.b. .. .. .	74.9	86.1	70.4
2. Transportation .. .. .	2.3	3.2	3.1
3. Other .. .. .	5.3	6.0	6.7
<b>Total credits .. .. .</b>	<b>82.5</b>	<b>95.3</b>	<b>80.2</b>
<i>Debits with Dollar Area—</i>			
4. Imports f.o.b. .. .. .	126.4	124.0	132.7
5. Transportation—			
Freight .. .. .	18.5	20.7	22.3
Other (incl. Marine Insurance) .. .. .	1.2	1.2	1.3
6. Investment Income—			
Public Authorities .. .. .	2.7	2.7	3.1
Undistributed Income .. .. .	19.3	19.6	19.7
Dividends, Profits, etc. .. .. .	11.3	12.9	16.5
7. Miscellaneous—			
Travel .. .. .	1.6	2.3	3.9
Business Expenses .. .. .	2.4	2.3	2.6
Film Rentals .. .. .	2.6	2.6	3.8
Other .. .. .	6.7	7.0	9.5
<b>Total debits .. .. .</b>	<b>192.7</b>	<b>195.3</b>	<b>215.4</b>
8. <i>Balance with Dollar Area</i> .. .. .	-110.2	-100.0	-135.2
9. Other current transactions .. .. .	6.2	12.4	- 2.3
<b>Balance on Current Account .. .. .</b>	<b>-104.0</b>	<b>- 87.6</b>	<b>-137.5</b>
INVESTMENT AND FINANCING ACCOUNT.			
10. Gold sales to the United Kingdom .. .. .	..	25.0	..
11. Net purchases of dollars from the United Kingdom .. .. .	40.2	23.2	69.9
12. Increase (-) in Aust. dollar balances .. .. .	- 1.8	- 4.9	- 0.3
13. Official loans—			
I.B.R.D. .. .. .	17.9	3.1	13.2
Other .. .. .	8.6	0.1	9.2
14. I.M.F. and I.F.C. .. .. .	..	- 1.0	..
15. Identified private capital—			
Undistributed income (net) .. .. .	19.4	19.7	19.8
Other .. .. .	13.3	7.0	(b)
16. Balancing Item .. .. .	6.4	15.4	25.7
<b>Balance on Investment and Financing Account .. .. .</b>	<b>104.0</b>	<b>87.6</b>	<b>137.5</b>

(a) Preliminary. For revised figures see Appendix.

(b) Not available, included in balancing item.

NOTE.—In current account, - indicates debit items. In investment account, - indicates net decreases in liabilities or net increases in assets.

## CHAPTER XIV.

### TRANSPORT AND COMMUNICATION.

NOTE.—Most of the statistics in this chapter cover the year 1957–58. More detailed figures for this and earlier years will be found in the annual bulletin, *Transport and Communication*.

#### PART I.—TRANSPORT.

##### A. SHIPPING.

##### § 1. Control of Shipping.

1. **War-time Control.**—An account of the action taken by the Commonwealth Government to control and regulate shipping throughout Australian waters during the 1939–45 War was given in Official Year Book No. 36, pages 121–30.

2. **Post-war Control and Developments.**—A brief account of the post-war control of shipping and the establishment of the Australian Stevedoring Industry Board and the Australian Shipping Board will be found in Official Year Book No. 39, pages 147–8.

The Maritime Industry Commission, established during the 1939–45 War under National Security legislation, was abolished on 19th December, 1952. Permanent legislation to cover many of the matters formerly dealt with by the Commission was enacted in 1952 in the form of amendments to the Navigation Act 1912–1950 (*see p. 518*).

As at 30th June, 1958, the Australian National Line operated 46 vessels totalling 186,531 gross tons, comprising thirteen "A" or River Class vessels of an average of 5,149 gross tons, five "B" Class vessels of an average of 3,923 gross tons, six "D" Class vessels of an average of 2,377 gross tons, two "D/A" Class vessels of an average of 2,407 gross tons, five "E" Class vessels of an average of 584 gross tons, two "Y" Class vessels of an average of 3,460 gross tons, five vessels of an average of 7,346 gross tons, three vessels of an average of 4,891 gross tons, two vessels of an average of 7,556 gross tons and three vessels of an average of 1,517 gross tons, all of which were built in Australian yards, with the exception of four vessels, totalling 18,045 gross tons, which were built overseas. Of these, 25 are engaged in the heavy trades (two colliers), two are engaged in the shipment of pyrites and the balance carry general cargo.

In the international sphere, a Convention establishing an Inter-Governmental Maritime Consultative Organization within the framework of the United Nations was ratified by the last of the 21 shipowning nations on 17th March, 1958. The major objectives of this organization are to provide machinery for co-operation among governments with shipping engaged in international trade, and to encourage the removal by governments of discriminatory action and unnecessary restrictions regarding such shipping.

This organization is designed to replace the United Maritime Consultative Council, which was established on a tentative basis after the expiry of the war-time United Maritime Authority and Combined Adjustment Board.

### § 2. System of Record.

In the system of recording statistics of oversea shipping, Australia is considered as a unit, and therefore only one entry and one clearance are counted for each voyage, without regard to the number of States visited (*see* also § 4, p. 506).

On arrival at, or departure from, a port in Australia, whether from or for an oversea country or from or for another port in Australia, the master or agent must "enter" the vessel with the Customs authorities at the port, and supply certain prescribed information in regard to the ship, passengers and cargo. At the end of each month, the information so obtained is forwarded to this Bureau. This arrangement has been in operation since 1st July, 1924.

The volume of the vessel, as distinct from the cargo it carries, is recorded in net tons, i.e., the gross tonnage or internal cubic capacity less certain deductions on account of crew spaces, engine room, water ballast and other spaces not used for passengers or cargo. It is thus a rough measure of the capacity of the vessel for cargo or passengers. The unit of measurement is the *ton register* of 100 cubic feet.

The majority of cargo is recorded in terms of the ton weight of 2,240 lb. However, some additional cargo, mainly bulky commodities, is shipped and recorded on the basis of 40 cubic feet of space occupied representing 1 ton measurement.

From 1st July, 1914, trade and shipping statistics of Australia have been recorded for the financial years ending 30th June.

### § 3. Oversea Shipping.

1. **Total Movement.**—The following table shows the number of entrances and clearances combined of oversea vessels at Australian ports, and the aggregate net tonnage, during each of the years 1953–54 to 1957–58 :—

**OVERSEA SHIPPING : ENTRANCES AND CLEARANCES (COMBINED) OF VESSELS DIRECT, AUSTRALIA.**

Particulars.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
Number of Vessels .. .. .	4,127	4,505	4,882	5,290	5,254
Net Tonnage .. .. '000 tons	17,733	20,003	22,324	23,659	24,515

The average net tonnage per vessel rose from 2,919 in 1921–22 to 4,666 in 1957–58.

Particulars of the total oversea movement of shipping for each year from 1822 to 1920–21 were published in Official Year Book No. 15, page 507, and for each year from 1921–22 to 1950–51 in Official Year Book No. 40, page 97.

2. **Total Oversea Shipping, States.**—The following table shows, for each State and the Northern Territory, the number of entrances and clearances of vessels direct from and to oversea countries, and the aggregate net tonnage, during the year 1957–58.

**OVERSEA SHIPPING : ENTRANCES AND CLEARANCES OF VESSELS DIRECT,  
1957-58.**

Particulars.		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	No.	863	469	375	229	636	57	27	2,656
	'000 net tons	3,860	2,553	1,200	890	3,634	210	37	12,384
Clearances	No.	759	395	540	201	650	31	22	2,598
	'000 net tons	3,457	2,194	2,051	764	3,467	148	50	12,131

3. Shipping Communication with Various Countries.—A vessel arriving in Australia from overseas is recorded as coming from the country where the voyage commenced, irrespective of the number of intermediate ports of call. Similarly, a vessel leaving Australia is recorded as going to the country where the voyage is scheduled to terminate.

The following table shows statistics of the net tonnage entered and cleared, with cargo and in ballast, according to the principal countries where vessels commenced or terminated their voyages to or from Australia.

**OVERSEA SHIPPING : COUNTRIES FROM WHICH ENTERED OR FOR WHICH  
CLEARED, AUSTRALIA.**

Country from which Entered or for which Cleared.	With Cargo or in Ballast.	Net Tonnage Entered ('000).			Net Tonnage Cleared ('000).		
		1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
United Kingdom .. ..	Cargo	1,833	1,568	1,654	2,002	2,120	1,954
	Ballast	75	17	35	121	10	4
New Zealand .. ..	Cargo	568	602	762	953	1,019	1,151
	Ballast	383	381	483	65	54	55
Other Commonwealth Countries	Cargo	2,249	2,507	2,341	1,497	1,796	1,772
	Ballast	136	421	157	1,003	791	828
Arabia .. ..	Cargo	1,226	1,171	1,561	66	59	69
	Ballast	11	6	23	1,225	1,422	1,893
Indonesia .. ..	Cargo	567	918	1,043	155	183	140
	Ballast	92	203	140	650	794	792
Japan .. ..	Cargo	344	376	494	502	716	847
	Ballast	254	453	441	10	25	6
United States of America ..	Cargo	496	558	627	340	473	577
	Ballast		3	14	51	28	36
Other Foreign Countries ..	Cargo	2,812	2,412	2,488	1,372	1,505	1,363
	Ballast	182	219	121	1,084	850	644
Total .. ..	Cargo	10,095	10,112	10,970	6,887	7,871	7,873
	Ballast	1,133	1,703	1,414	4,209	3,974	4,258
Total Cargo and Ballast ..	..	11,228	11,815	12,384	11,096	11,845	12,131

4. Nationality of Oversea Shipping.—Vessels registered at ports in Commonwealth countries accounted for 53.1 per cent. of the net tonnage of shipping entering Australian ports in 1957-58. This proportion has varied considerably since the end of the 1939-45 War. By 1946-47, the proportion had increased from the low level of 43.4 per cent. recorded in 1943-44 to 76.2 per cent., but since then has steadily declined.

Particulars of the nationality of overseas shipping which entered Australian ports during each of the years 1955-56 to 1957-58 are given in the following table.

**OVERSEA SHIPPING : COUNTRY OF REGISTRATION OF VESSELS  
ENTERED, AUSTRALIA.**

('000 Net Tons.)

Vessels Registered at Ports in—		1955-56.	1956-57.	1957-58.	Vessels Registered at Ports in—		1955-56.	1956-57.	1957-58.
<i>Commonwealth Countries—</i>					<i>Foreign Countries—</i>				
Australia ..	..	308	281	360	<i>continued—</i>				
New Zealand ..	..	395	462	503	Norway .. ..	..	1,246	1,397	1,459
United Kingdom ..	..	5,730	5,680	5,242	Panama .. ..	..	473	507	558
Other .. ..	..	218	377	467	Sweden .. ..	..	480	332	384
					U.S.A. .. ..	..	182	312	385
					Other .. ..	..	262	373	421
In Cargo ..	..	5,908	5,747	5,737					
In Ballast ..	..	743	1,053	835	In Cargo ..	..	4,187	4,366	5,232
					In Ballast ..	..	390	649	580
<i>Total Commonwealth Countries</i> ..	..	6,651	6,800	6,572	<i>Total Foreign Countries</i> ..	..	4,577	5,015	5,812
<i>Proportion of total</i> ..	%	59.2	57.6	53.1	<i>Proportion of total</i> ..	%	40.8	42.4	46.9
<i>Foreign Countries—</i>					<i>All Countries—</i>				
Denmark .. ..	..	283	240	325	In Cargo ..	..	10,095	10,112	10,970
France(a) .. ..	..	192	206	314	<i>Proportion of total</i> %	..	89.9	85.6	88.6
Germany(b) ..	..	142	94	140	In Ballast ..	..	1,133	1,703	1,414
Italy .. ..	..	379	464	553	<i>Proportion of total</i> %	..	10.1	14.4	11.4
Japan .. ..	..	308	420	661					
Netherlands ..	..	630	670	612	<b>Grand Total</b> ..	..	<b>11,228</b>	<b>11,815</b>	<b>12,384</b>

(a) Includes New Caledonia.

(b) Federal Republic.

The Australian tonnage which entered Australian ports from overseas during the year 1957-58 represented 2.9 per cent. of the total tonnage entered and was confined mainly to the New Zealand and Pacific Islands trade.

The proportion of oversea shipping tonnage which entered Australia in cargo fell from 88.9 per cent. in 1938-39 to 79.4 per cent. in 1947-48. In 1957-58 it was 88.6 per cent. However, the proportion of shipping which cleared in cargo declined from 87.6 per cent. in 1938-39 to 64.9 per cent. in 1957-58, the trend over the period being generally downward.

#### § 4. Interstate Shipping.

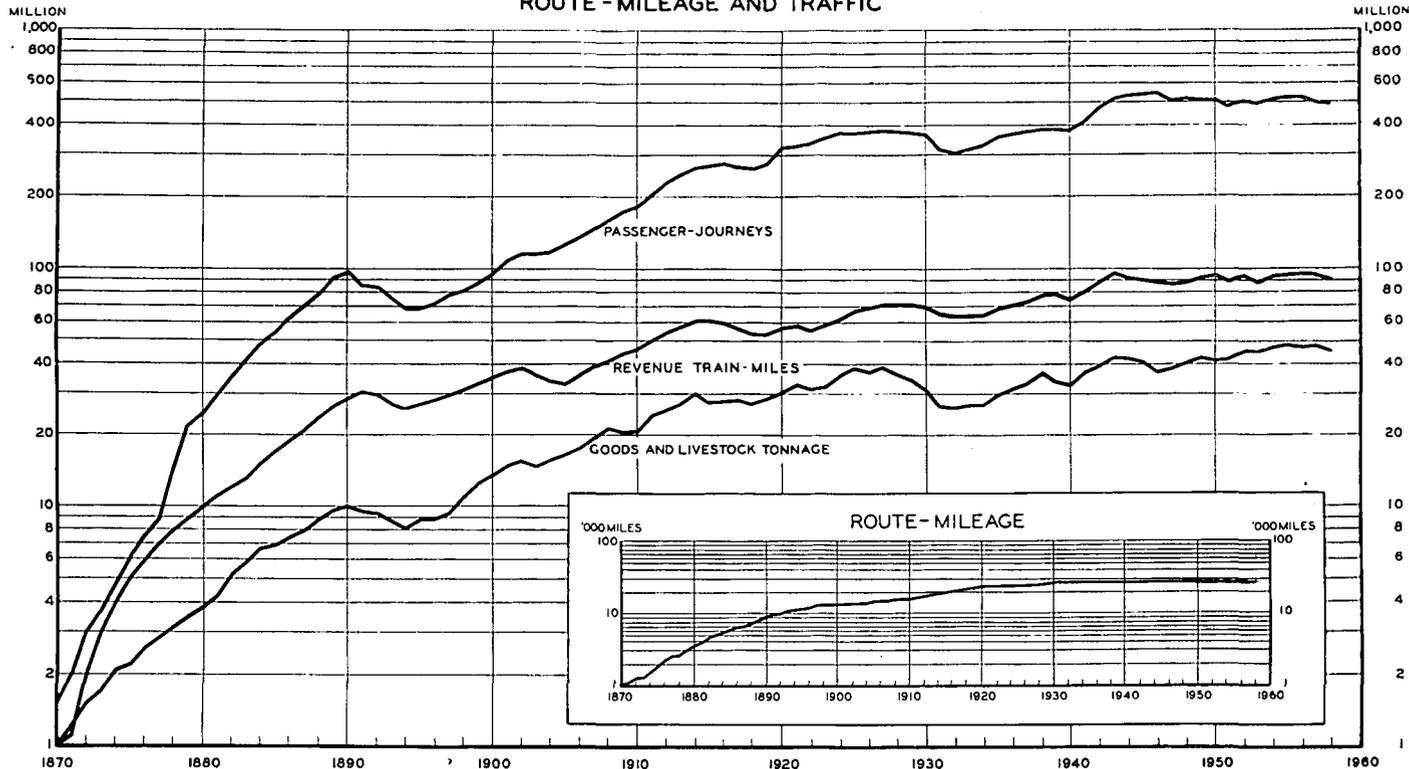
1. *System of Record.*—*Interstate Shipping* comprises two elements : (a) Vessels engaged solely in interstate trade ; and (b) Vessels trading between Australia and oversea countries and in the course of their voyages proceeding from one State to another. (It should be mentioned that these vessels, except under special circumstances, do not engage in interstate carrying.) No complexity enters into the record of those in category (a), but with regard to the method of recording the movements of the oversea vessels (b) some explanation is necessary. Each State desires that its shipping statistics (which are prepared in this Bureau) should show in full its shipping communication with oversea countries, but at the same time it is necessary to avoid any duplication in the statistics for Australia as a whole. In order to meet these dual requirements, a vessel arriving in any State from an oversea country—say the United Kingdom—via another State, is recorded in the second State as from the United Kingdom via *States*, thus distinguishing the movement from a direct oversea entry. Continuing the voyage, the vessel is again recorded for the statistics of the third State as from the United Kingdom “Oversea via *States*”. On an inward voyage, the *clearance* from the first State to the second State is a *clearance* interstate, and is included with interstate tonnage in conformity with the pre-federation practice of the States, and to preserve the continuity of State statistics. Thus, movements of ships which are, from the standpoint of Australia as a whole, purely coastal movements, must for the individual States be recorded as “Oversea via *States*” or “Interstate” according to the direction of the movement. The significance of the record of these movements will be seen more clearly from the following tabular presentation of the inward and outward voyages to and from Australia of a mail steamer which, it is presumed, reaches Fremantle (Western Australia) and then proceeds to the terminal port of the voyage—Sydney (New South Wales)—via South Australia and Victoria. From the terminal port the vessel will commence the outward voyage, and retrace its inward track.



# GOVERNMENT RAILWAYS : AUSTRALIA, 1870 to 1958

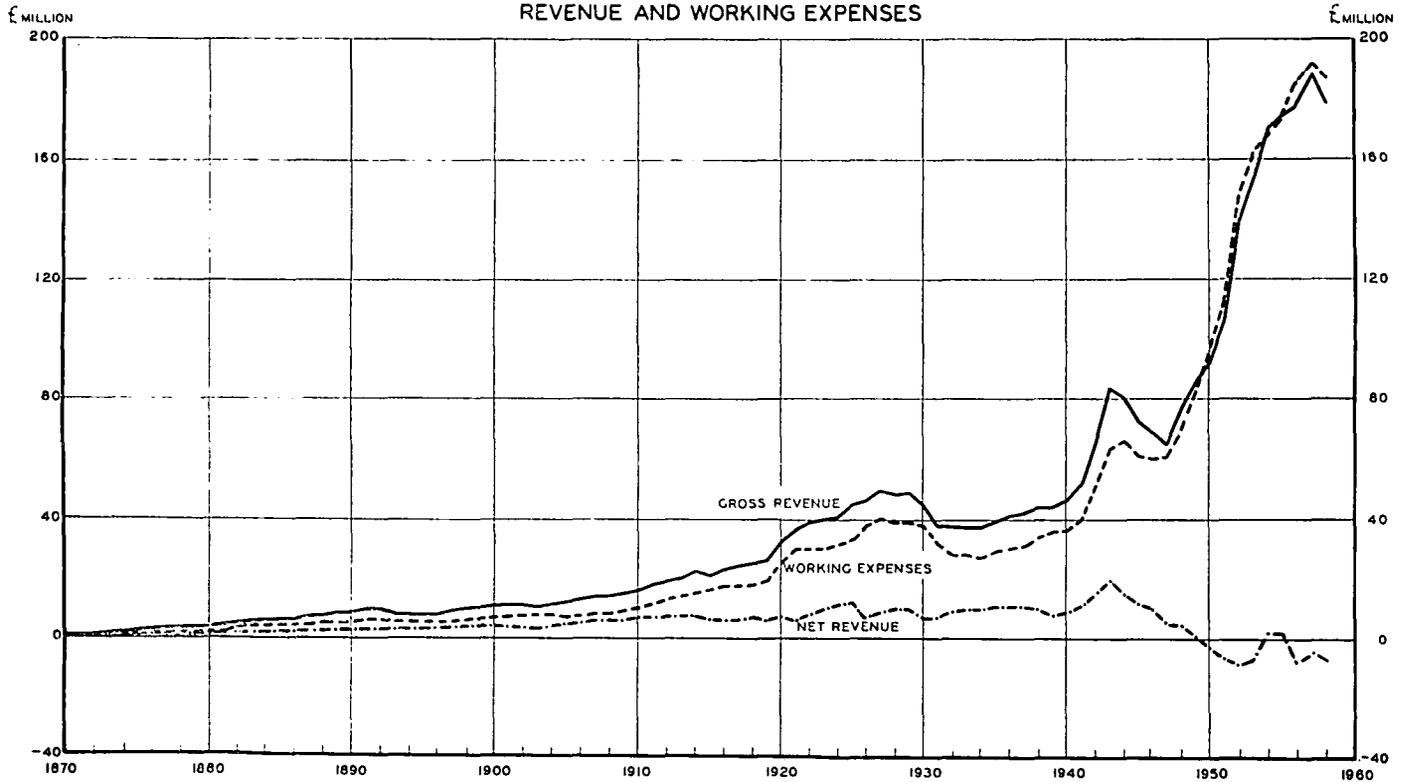
RATIO GRAPH

## ROUTE - MILEAGE AND TRAFFIC



NOTE:— VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE. ACTUAL NUMBERS ARE INDICATED BY SCALE.

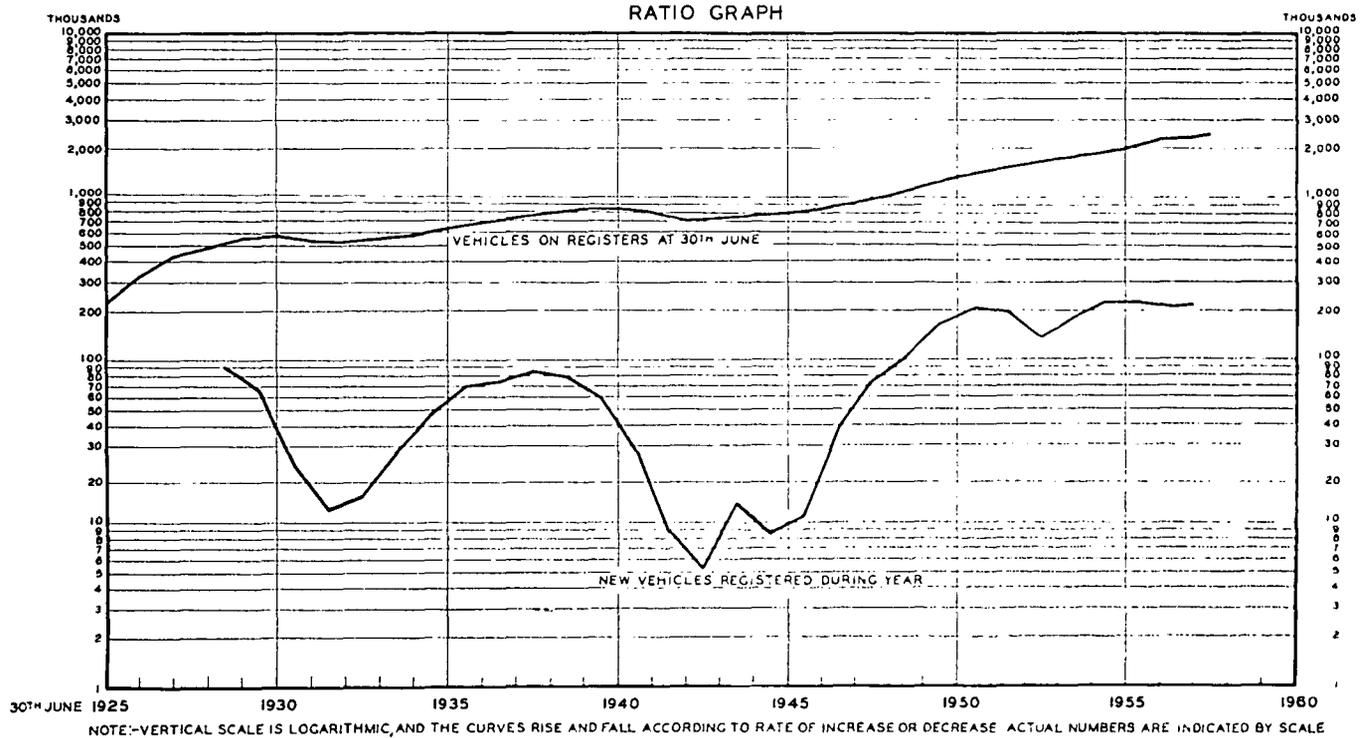
# GOVERNMENT RAILWAYS : AUSTRALIA, 1870 to 1958



NOTE.—Gross Revenue excludes Government Grants.

# MOTOR VEHICLE REGISTRATIONS: AUSTRALIA, 1925 TO 1958

(EXCLUDING MOTOR CYCLES)



ITINERARY OF AN OVERSEA VESSEL ON THE AUSTRALIAN COAST.

Particulars.	Recorded as—	
	For the State and for Australia.	For the States.
<b>Inward Voyage—</b>		
Enters Fremantle from United Kingdom	Oversea direct	
Clears Fremantle for Adelaide	.. ..	Interstate direct
Enters Adelaide from United Kingdom via Fremantle	.. ..	.. .. Oversea via States
Clears Adelaide for Melbourne	.. ..	Interstate direct
Enters Melbourne from United Kingdom via Adelaide	.. ..	.. .. Oversea via States
Clears Melbourne for Sydney	.. ..	Interstate direct
Enters Sydney from United Kingdom via Melbourne	.. ..	.. .. Oversea via States
<b>Outward Voyage—</b>		
Clears Sydney for United Kingdom via Melbourne	.. ..	.. .. Oversea via States
Enters Melbourne from Sydney	.. ..	Interstate direct
Clears Melbourne for United Kingdom via Adelaide	.. ..	.. .. Oversea via States
Enters Adelaide from Melbourne	.. ..	Interstate direct
Clears Adelaide for United Kingdom via Fremantle	.. ..	.. .. Oversea via States
Enters Fremantle from Adelaide	.. ..	Interstate direct
Clears Fremantle for United Kingdom	Oversea direct	

From the method outlined above, the requirements for Australia and for the individual States are ascertained as follows. (a) The aggregate of all ships recorded for each State as "Oversea direct" gives the overseas shipping for Australia as a whole; (b) the aggregate for all ships recorded in any State as "Oversea direct" plus those recorded as "Oversea via States" gives the total *oversea shipping* for that State; and (c) the aggregate for all ships recorded as "Oversea via States" may also be used, together with those recorded as "Interstate direct", to furnish figures showing the total *interstate movement* of shipping.

However, it should be remembered that all overseas vessels do not follow the same itinerary as the vessel in the table above.

2. *Interstate Movement.*—(i) *Interstate Direct.* The following table shows the number of entrances and the net tonnage of vessels recorded into each State and the Northern Territory from any other State (including overseas vessels on interstate direct voyages) during each of the years 1955–56 to 1957–58. The shipping of the Murray River, between the States of New South Wales, Victoria and South Australia, is excluded.

INTERSTATE MOVEMENT OF SHIPPING: ENTRANCES OF VESSELS INTERSTATE DIRECT.

State or Territory.	Number.			Net Tons ('000).		
	1955–56.	1956–57.	1957–58.	1955–56.	1956–57	1957–58.
New South Wales .. ..	1,634	1,711	1,860	4,606	4,853	5,116
Victoria .. ..	1,614	1,594	1,673	4,475	4,128	4,231
Queensland .. ..	597	688	690	1,554	1,806	1,766
South Australia .. ..	1,027	1,088	1,079	3,733	3,876	3,767
Western Australia .. ..	554	526	548	2,753	2,590	2,604
Tasmania .. ..	893	1,025	1,104	984	1,203	1,267
Northern Territory .. ..	38	45	47	55	93	86
<b>Australia .. ..</b>	<b>6,357</b>	<b>6,677</b>	<b>7,001</b>	<b>18,160</b>	<b>18,549</b>	<b>18,837</b>

From 1938–39, the total net tonnage of interstate shipping declined steadily each year until 1942–43, when it represented only 38 per cent. of the total for the pre-war year. It remained practically unchanged during the next three years, but increased by almost one-third in 1946–47. By 1957–58 the total had risen to 95 per cent. of the 1938–39 total.

(ii) *Oversea via States.* To ascertain the aggregate movement of shipping between the States, including the total interstate movement of oversea vessels, the figures in the following table, which show the number of entrances and clearances of vessels to and from oversea countries via other Australian States and the aggregate tonnage, must be added to those in the preceding table.

**INTERSTATE MOVEMENT OF SHIPPING : ENTRANCES AND CLEARANCES OF VESSELS OVERSEA VIA OTHER AUSTRALIAN STATES, 1957-58.**

Particulars.		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	No.	589	688	330	376	28	80	..	2,091
	'000 net tons	3,052	3,591	1,508	1,913	165	395	..	10,624
Clearances	No.	583	636	201	367	18	140	1	1,946
	'000 net tons	2,823	3,341	890	1,838	103	632	(a)	9,627

(a) 143 net tons.

Oversea vessels moving interstate are with few exceptions not engaged in the active interstate trade of Australia, but are merely proceeding to the several States in continuation of their oversea voyages.

(iii) *Total, Australia.* The following table shows the total interstate movement of shipping, including oversea vessels travelling oversea via States and interstate direct, for each of the years 1953–54 to 1957–58.

**INTERSTATE MOVEMENT OF SHIPPING : TOTAL, AUSTRALIA.**

Particulars.			1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Entrances	..	No.	7,983	8,300	8,362	8,505	9,092
		'000 net tons	26,925	28,515	28,868	27,962	29,461
Clearances	..	No.	8,036	8,151	8,460	8,480	9,093
		'000 net tons	27,190	28,292	29,095	27,763	29,553

(iv) *Total, States.* The following table shows, for each State and the Northern Territory, the number of entrances and clearances of vessels from and for other States (including the interstate movement of oversea vessels) during the year 1957–58, together with the aggregate net tonnage.

**INTERSTATE MOVEMENT OF SHIPPING : TOTAL, 1957-58.**

Particulars.		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	.. No.	2,449	2,361	1,020	1,455	576	1,184	47	9,092
	'000 net tons	8,168	7,822	3,275	5,679	2,769	1,662	86	29,461
Clearances	No.	2,524	2,406	834	1,472	569	1,242	46	9,093
	'000 net tons	8,450	8,081	2,401	5,749	3,032	1,775	65	29,553

3. *Shipping Engaged Solely in Interstate Trade.*—The following table shows, for each State and the Northern Territory, the number of entrances direct from other States, of vessels engaged solely in interstate trade during the year 1957–58, together with the net tonnage.

## SHIPPING ENGAGED SOLELY IN INTERSTATE TRADE: ENTRANCES, 1957-58.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Ships entered ..	1,406	1,264	454	788	215	962	38	5,127
Net tons .. '000	3,268	1,995	724	2,273	725	741	53	9,779

4. Interstate and Coastal Shipping Services.—The following table shows particulars, so far as they are available, of all vessels engaged in the regular interstate or coastal services at the end of each of the years 1954 to 1958:—

## INTERSTATE AND COASTAL SHIPPING SERVICES: AUSTRALIA.

Particulars.	1954.	1955.	1956.	1957.	1958.
Number of companies operating ..	36	41	41	41	48
Number of vessels ..	174	185	174	178	196
Tonnage { Gross .. .. .	524,975	522,326	511,534	544,842	536,666
Net .. .. .	289,854	283,771	275,337	292,110	282,651
Horsepower (Nominal) .. .. .	53,017	50,455	48,667	51,498	56,265
Number of passengers for which licensed(a) { 1st class .. .. .	2,198	1,966	1,777	1,787	2,239
2nd class and steerage .. .. .	626	648	526	523	428
Complement of { Masters and officers .. .. .	675	709	682	702	713
Crew { Engineers .. .. .	785	795	776	805	770
Other .. .. .	4,950	4,853	4,563	4,552	4,375

(a) Excludes purely day-passenger accommodation.

NOTE.—This table excludes particulars of a small number of chartered vessels for which returns could not be obtained.

## § 5. Shipping at Principal Ports.

1. Total Shipping, Australia.—The following table shows the total volume of shipping—oversea, interstate and coastwise—which entered the principal ports of Australia during the years 1956-57 and 1957-58. Warships are excluded from the table.

## TOTAL SHIPPING: ENTRANCES AT PRINCIPAL PORTS, AUSTRALIA.

Port of Entry.	1956-57.		1957-58.		Port of Entry.	1956-57.		1957-58.	
	Num-ber.	Net Tons.	Num-ber.	Net Tons.		Num-ber.	Net Tons.	Num-ber.	Net Tons.
		'000.		'000.			'000.		'000.
<i>New South Wales—</i>					<i>South Australia—</i>				
Sydney(a) ..	4,357	10,629	4,433	11,318	Adelaide ..	2,668	5,001	2,671	5,273
Newcastle ..	2,348	4,041	2,441	4,336	Port Lincoln ..	258	347	432	401
Port Kembla ..	636	1,983	683	2,068	Port Pirie ..	416	956	430	874
					Rapid Bay ..	138	196	151	231
					Walleroo ..	130	147	106	174
					Whyalla ..	509	1,596	447	1,429
<i>Victoria—</i>					<i>Western Australia—</i>				
Melbourne ..	2,471	8,668	2,583	9,148	Fremantle(b) ..	1,163	6,095	1,121	5,962
Geelong ..	459	1,930	454	1,923	Albany ..	86	356	124	487
					Bunbury ..	80	214	85	244
					Carnarvon ..	95	146	93	145
					Geraldton ..	117	349	118	320
					Yampi ..	111	206	152	284
<i>Queensland—</i>					<i>Tasmania—</i>				
Brisbane ..	1,127	3,518	1,217	3,755	Hobart ..	432	890	471	1,037
Bowen ..	73	260	59	186	Burnie ..	253	377	273	422
Cairns ..	208	540	260	563	Devonport ..	257	225	257	235
Gladstone ..	87	291	95	318	Launceston ..	493	508	523	556
Mackay ..	90	271	87	269					
Rockhampton ..	128	292	101	221	<i>Northern Territory—</i>				
Townsville ..	330	1,001	347	1,029	Darwin ..	61	123	77	127

(a) Includes Botany Bay.

(b) Includes Kwinana.

2. Total Shipping—Australia, New Zealand and the United Kingdom.—The following table shows the total shipping tonnage which entered the principal ports of Australia during 1957–58 and of New Zealand and the United Kingdom during 1957.

**TOTAL SHIPPING : ENTRANCES AT PORTS, AUSTRALIA, NEW ZEALAND AND THE UNITED KINGDOM.**

(\*000 Net Tons.)

Port.	Net Tonnage Entered.	Port.	Net Tonnage Entered.	Port.	Net Tonnage Entered.
<b>AUSTRALIA—</b>		<b>NEW ZEALAND—</b>		<b>ENGLAND AND WALES—</b>	
Sydney (N.S.W.) ..	11,318	Wellington ..	3,922	<i>continued.</i>	
Melbourne (Vic.) ..	9,148	Auckland ..	3,584	Manchester (including Runcorn) ..	7,210
Fremantle (W.A.) ..	5,962	Lyttleton ..	2,686	Hull ..	5,726
Adelaide (S.A.) ..	5,273	Otago ..	1,149	Bristol ..	4,945
Newcastle (N.S.W.) ..	4,336	Napier ..	626	Swansea ..	4,864
Brisbane (Qld.) ..	3,755	New Plymouth ..	549	Dover ..	4,861
Port Kembla (N.S.W.) ..	2,068	Bluff ..	459	Middlesbrough ..	4,799
Geelong (Vic.) ..	1,923			Cardiff ..	3,816
Whyalla (S.A.) ..	1,429	<b>ENGLAND AND WALES—</b>		<b>SCOTLAND—</b>	
Hobart (Tas.) ..	1,037	London ..	36,811	Glasgow ..	7,208
Townsville (Qld.) ..	1,029	Southampton ..	20,369		
Port Pirie (S.A.) ..	874	Liverpool (including Birkenhead) ..	18,480	<b>NORTHERN IRELAND—</b>	
Cairns (Qld.) ..	563	Tyne Ports ..	8,152	Belfast ..	7,069
Launceston (Tas.) ..	556				

**§ 6. Shipping Cargo.**

1. Oversea and Interstate Cargo.—(i) *Australia.* The table hereunder shows the aggregate tonnage of oversea and interstate cargo discharged and shipped at Australian ports for the years 1953–54 to 1957–58. Most of the cargo is recorded in terms of the ton weight of 2,240 lb., the remainder, mainly bulky commodities, being shipped and recorded on the basis of 40 cubic feet of space occupied representing 1 ton measurement.

**SHIPPING CARGO MOVEMENT : AUSTRALIA.**

(\*000 Tons.)

Year.	Oversea Cargo.				Interstate Cargo.			
	Discharged.		Shipped.		Discharged.		Shipped.	
	Weight.	Meas.	Weight.	Meas.	Weight.	Meas.	Weight.	Meas.
1953–54 ..	8,520	2,812	5,765	1,355	9,059	1,790	9,105	1,539
1954–55 ..	10,992	3,403	6,084	1,420	10,136	1,621	10,212	1,472
1955–56 ..	12,431	3,421	6,666	1,546	11,184	1,572	11,632	1,315
1956–57 ..	12,596	2,752	8,734	1,378	11,862	1,285	11,899	1,290
1957–58 ..	13,719	2,914	7,366	1,489	12,621	1,335	12,614	1,157

(ii) *Principal Ports.* The following table shows the tonnage of oversea and interstate cargo discharged and shipped at the principal ports of Australia during 1957-58.

## CARGO DISCHARGED AND SHIPPED AT PRINCIPAL PORTS, 1957-58.

('000 Tons.)

Port.	Discharged.				Shipped.			
	Oversea.		Interstate.		Oversea.		Interstate.	
	Wt.	Meas.	Wt.	Meas.	Wt.	Meas.	Wt.	Meas.
Sydney .. .. .	3,916	1,251	1,015	268	591	362	639	253
Newcastle .. .. .	329	..	2,082	..	917	..	2,634	..
Port Kembla .. .. .	320	..	2,386	..	284	..	614	..
Other .. .. .	..	..	..	..	14	18	..	2
<i>Total, New South Wales</i> .. .. .	<i>4,565</i>	<i>1,251</i>	<i>5,483</i>	<i>268</i>	<i>1,806</i>	<i>380</i>	<i>3,887</i>	<i>255</i>
Melbourne .. .. .	2,436	995	2,208	339	506	541	589	365
Geelong .. .. .	2,310	37	277	..	569	..	782	..
Portland .. .. .	64	..	20	..	18	..	..	..
<i>Total, Victoria</i> .. .. .	<i>4,810</i>	<i>1,032</i>	<i>2,505</i>	<i>339</i>	<i>1,093</i>	<i>541</i>	<i>1,371</i>	<i>365</i>
Brisbane .. .. .	265	194	823	106	326	96	22	42
Cairns .. .. .	54	2	73	16	158	1	117	20
Gladstone .. .. .	22	..	63	..	23	2	123	..
Mackay .. .. .	5	..	53	..	305	1	13	..
Townsville .. .. .	41	3	163	21	201	7	113	1
Other .. .. .	43	..	27	12	187	5	281	3
<i>Total, Queensland</i> .. .. .	<i>430</i>	<i>199</i>	<i>1,202</i>	<i>155</i>	<i>1,200</i>	<i>112</i>	<i>669</i>	<i>66</i>
Port Adelaide .. .. .	383	276	1,738	129	393	115	151	81
Ardrossan .. .. .	..	..	..	..	113	..	114	..
Port Lincoln .. .. .	44	4	35	2	205	..	37	..
Port Pirie .. .. .	3	..	218	..	514	..	237	..
Rapid Bay .. .. .	..	..	..	..	..	..	413	..
Whyalla .. .. .	6	..	301	..	8	..	3,182	..
Other .. .. .	45	2	4	1	285	9	236	19
<i>Total, South Australia</i> .. .. .	<i>481</i>	<i>282</i>	<i>2,296</i>	<i>132</i>	<i>1,518</i>	<i>124</i>	<i>4,370</i>	<i>100</i>
Fremantle .. .. .	2,893	118	333	173	1,275	81	1,056	55
Bunbury .. .. .	64	..	3	..	93	79	61	18
Geraldton .. .. .	48	..	..	..	139	5	144	..
Yampi .. .. .	..	..	1	..	10	..	445	..
Other .. .. .	82	2	33	31	93	18	68	9
<i>Total, Western Australia</i> .. .. .	<i>3,087</i>	<i>120</i>	<i>370</i>	<i>204</i>	<i>1,610</i>	<i>183</i>	<i>1,774</i>	<i>82</i>
Hobart .. .. .	140	16	451	111	41	144	226	93
Burnie .. .. .	14	6	57	33	33	1	61	120
Launceston .. .. .	130	..	135	43	48	..	85	30
Other .. .. .	19	8	68	43	6	4	169	46
<i>Total, Tasmania</i> .. .. .	<i>303</i>	<i>30</i>	<i>711</i>	<i>230</i>	<i>128</i>	<i>149</i>	<i>541</i>	<i>289</i>
Darwin, Northern Territory .. .. .	43	..	54	7	11	..	2	..
<i>Australia</i> .. .. .	<i>13,719</i>	<i>2,914</i>	<i>12,621</i>	<i>1,335</i>	<i>7,366</i>	<i>1,489</i>	<i>12,614</i>	<i>1,157</i>

2. **Oversea Cargo according to Nationality of Vessels.**—The following table shows the total oversea cargo, discharged and shipped combined, according to the countries in which the vessels were registered, during each of the years 1955–56 to 1957–58:—

**OVERSEA CARGO DISCHARGED AND SHIPPED : COUNTRY OF REGISTRATION OF VESSELS, AUSTRALIA.**

(’000 Tons.)

Vessels Registered at Ports in—	1955–56.		1956–57.		1957–58.	
	Weight.	Meas.	Weight.	Meas.	Weight.	Meas.
<b>Commonwealth Countries—</b>						
Australia .. .. .	250	117	366	101	387	94
Hong Kong .. .. .	121	45	350	37	241	40
New Zealand .. .. .	432	380	567	388	593	407
United Kingdom .. .. .	9,377	2,924	9,761	2,352	7,933	2,488
Other .. .. .	239	128	421	130	558	163
<i>Total, Commonwealth Countries</i> .. .. .	<i>10,419</i>	<i>3,594</i>	<i>11,465</i>	<i>3,008</i>	<i>9,712</i>	<i>3,192</i>
Proportion of Total .. %	54.6	72.4	53.8	72.8	46.1	72.5
<b>Foreign Countries—</b>						
Denmark .. .. .	566	88	545	34	785	30
France and New Caledonia .. .. .	221	47	182	40	343	37
Germany, Federal Republic of .. .. .	320	96	277	106	263	91
Italy .. .. .	167	67	499	51	509	68
Japan .. .. .	547	83	839	53	1,251	102
Netherlands .. .. .	1,131	190	1,069	214	1,025	238
Norway .. .. .	2,985	294	3,336	194	3,734	217
Panama .. .. .	886	47	1,105	..	1,249	21
Sweden .. .. .	1,135	236	844	174	798	164
United States of America .. .. .	253	161	296	209	288	196
Other .. .. .	467	64	873	47	1,128	47
<i>Total, Foreign Countries</i> .. .. .	<i>8,678</i>	<i>1,373</i>	<i>9,865</i>	<i>1,122</i>	<i>11,373</i>	<i>1,211</i>
Proportion of Total .. %	45.4	27.6	46.2	27.2	53.9	27.5
<b>Grand Total</b> .. .. .	<b>19,097</b>	<b>4,967</b>	<b>21,330</b>	<b>4,130</b>	<b>21,085</b>	<b>4,403</b>

**§ 7. Vessels Built and Registered.**

1. **Vessels Built.**—The following table shows the number and tonnage of vessels built in Australia during each of the calendar years 1954 to 1958, so far as such information can be ascertained from the Shipping Registers of the various States. However, the Merchant Shipping Act, under which vessels are registered in Australia, does not make it compulsory to register vessels under 15 tons burden if engaged in river or coastal trade. Larger vessels are also exempt from registration if not engaged in trade. Yachts and small trading vessels may be, and frequently are, registered at the request of the owners.

## VESSELS BUILT AND REGISTERED IN AUSTRALIA.

Year.	Steam.		Motor.(a)			Sailing.			Total.			
	No.	Tonnage.		No.	Tonnage.		No.	Tonnage.		No.	Tonnage.	
		Gross.	Net.		Gross.	Net.		Gross.	Net.		Gross.	Net.
1954 ..	2	11,289	5,706	12	11,890	6,546	..	..	..	14	23,179	12,252
1955 ..	2	3,905	1,903	9	185	156	2	9	9	13	4,099	2,068
1956 ..	1	7,583	4,203	22	14,552	8,432	1	3	3	24	22,138	12,638
1957 ..	2	15,166	8,202	25	19,211	11,164	..	..	..	27	34,377	19,366
1958 ..	1	7,274	4,343	21	15,293	9,341	1	24	16	23	22,591	13,700

(a) Includes vessels with auxiliary motors.

2. Vessels Registered.—The following table shows the number and net tonnage of steam, sailing and other vessels on the register of each State and the Northern Territory at 31st December, 1958 :—

## VESSELS REGISTERED, 31st DECEMBER, 1958.

State or Territory.	Steam and Motor.		Sailing.				Barges, Hulks, Dredges, etc., not Self-propelled.		Total.	
	No.	Net Tons.	Propelled by Sail only.		Fitted with Auxiliary Power.		No.	Net Tons.	No.	Net Tons.
			No.	Net Tons.	No.	Net Tons.				
New South Wales ..	297	57,331	27	2,126	111	1,450	10	948	445	61,855
Victoria ..	188	178,816	47	571	61	1,655	28	9,784	324	190,826
Queensland ..	93	38,566	30	682	46	518	4	830	173	40,596
South Australia ..	81	39,798	10	192	50	2,337	30	4,263	171	46,590
Western Australia ..	93	13,814	207	3,097	75	1,788	5	478	380	19,177
Tasmania ..	43	9,883	43	718	95	2,362	3	690	184	13,653
Northern Territory	1	14	16	154	7	137	..	..	24	305
<b>Australia ..</b>	<b>796</b>	<b>338,222</b>	<b>380</b>	<b>7,540</b>	<b>445</b>	<b>10,247</b>	<b>80</b>	<b>16,993</b>	<b>1,701</b>	<b>373,002</b>

3. World Shipping Tonnage.—At 1st July, 1958, the total steamships, motorships and auxiliaries of 100 gross tons and upwards throughout the world amounted to 35,202, with a gross tonnage of 118,034,000. Of these totals, steamships numbered 16,000 for 71,718,000 gross tons, motorships 18,245 for 46,127,000 gross tons and auxiliaries 957 for 189,000 gross tons. Included therein were 4,023 oil tankers of 100 gross tons and upwards, with a gross tonnage of 33,590,000. Australian steamships, motorships and auxiliaries, 353 for 631,000 gross tons, constituted 1.00 per cent. and 0.54 per cent. respectively of the total number and tonnage. There was one Australian oil tanker of 12,624 gross tons registered. This information has been derived from *Lloyd's Register of Shipping*.

## § 8. Miscellaneous.

1. Lighthouses.—A list of the principal lighthouses on the coast of Australia, giving details of the location, number, colour, character, period, candle-power and visibility of each light so far as particulars are available, will be found in *Transport and Communication*, Bulletin No. 46.

2. Distances by Sea.—The distances by sea between the ports of the capital cities of Australia and the most important ports in other countries which trade with Australia are published in the annual bulletin, *Transport and Communication*.

3. Shipping Freight Rates.—The *Quarterly Summary of Australian Statistics* shows a list of the ruling freight rates for general merchandise in respect of both oversea and interstate shipments. At 31st December, 1958, the rate for general merchandise from Australia to the United Kingdom and the Continent was £10 4s. per ton weight or measurement, while

the rates for wheat and wool (greasy) were respectively £4 10s. per ton weight and 3.39d. less 7 per cent. per lb. These rates, which are expressed in sterling, are subject to an adjustment of 2½ per cent. when freight is prepaid in Australia.

4. **Depth of Water at Main Ports.**—A table showing the depth of water available and tides at principal ports of Australia is published in the annual bulletin, *Transport and Communication*.

5. **Shipping Losses and Casualties.**—Courts of Marine Inquiry are constituted by a magistrate assisted by skilled assessors, and, when necessary, are held at the principal port in each State and at Launceston (Tasmania). Such courts have power to deal with the certificates of officers who are found at fault. Particulars of shipping losses and casualties reported on or near the coast during each of the years 1954 to 1958 are shown in the table below.

#### SHIPPING LOSSES AND CASUALTIES : AUSTRALIA.

Year.	Shipping Losses.			Other Shipping Casualties.			Total Shipping Casualties.		
	Vessels.	Net Tons.	Lives Lost.	Vessels.	Net Tons.	Lives Lost.	Vessels.	Net Tons.	Lives Lost.
1954 ..	..	..	..	149	426,878	..	149	426,878	..
1955 ..	1	53	..	220	694,847	..	221	694,900	..
1956 ..	2	529	18	237	771,418	..	239	771,947	18
1957 ..	1	249	..	224	709,432	..	225	709,681	..
1958 ..	1	98	5	179	525,528	..	180	525,626	5

6. **Commonwealth Navigation and Shipping Legislation.**—By section 51 (i) of the Commonwealth Constitution, the Parliament of the Commonwealth is empowered to make laws in respect of trade and commerce with other countries and among the States. By section 98, the power in this particular respect is further defined as extending to navigation and shipping.

A review of the introduction and development of the Navigation Act 1912-1950 was given in Official Year Book No. 40, pages 110-2. Amendments to the Principal Act were made by the Navigation Act 1952, the provisions of which covered the settlement of maritime industrial disputes, standards of accommodation to be provided on ships and the engagement and discipline of seamen.

Other shipping Acts under the trade and commerce power of the Commonwealth are the Sea-Carriage of Goods Act 1924, the Seamen's Compensation Act 1911-1954, and the Seamen's War Pensions and Allowances Act 1940-1955.

7. **Ports and Harbours.**—A report on "The Turn-round of Ships in Australian Ports" was submitted to the Commonwealth Government by Henry Basten, C.M.G., on 4th January, 1952. The report deals with all factors affecting the turn-round of ships and congestion in Australian ports and the measures that might be taken to effect improvement on both short-term and long-term bases. Further information on ports and harbours will be found in Chapter XIX.—Local Government.

#### B. GOVERNMENT RAILWAYS.

1. **General.**—The first steam-operated railway in Australia, between Melbourne and Port Melbourne, a distance of two miles, was opened on 12th September, 1854. It was owned and operated by the Melbourne and Hobson's Bay Railway Company. In the next one hundred years the mileage increased greatly and at 30th June, 1958, 26,427 route-miles (excluding several hundred miles of privately-owned line) were open for traffic. However, the operation of Australia-wide services is greatly hampered by the presence of many break-of-gauge stations, necessitated by the several gauges at present in use. The policy of government ownership and control of railways has been adopted in each State and at 30th June, 1958, 24,175 route-miles were owned by the State Governments and 2,252 route-miles by the Commonwealth Government. In the following tables details of the four lines owned by the Commonwealth are grouped and shown with the totals for the various State-owned systems. Separate particulars for each Commonwealth line and more detailed statistics for all lines are shown in the annual bulletin, *Transport and Communication*.

In some States, there are comparatively small privately-owned railway systems offering passenger and freight services to the public. Details of these private railways were included in Official Year Book No. 39 and previous issues, but owing to their relative unimportance and the incomplete nature of the statistics available, the series has been discontinued.

2. **Railway Communication in Australia.**—An account of the progress of railway construction in Australia since the opening of the first line in 1854 was given in Official Year Book No. 6, page 681 and in No. 22, page 259. The main ports on the mainland are connected by lines running approximately parallel to the coast and are the focal points of lines which radiate inland to the agricultural, mining and pastoral areas of the continent to a distance of up to 600 miles at some points. However, Darwin in the Northern Territory is not connected by rail to any other port. A 3 ft. 6 in. gauge railway extends southward from Darwin to Birdum, a distance of 317 miles, and from Port Augusta in South Australia northwards to Alice Springs in the Northern Territory, a distance of 771 miles.

Besides the construction of air-conditioned passenger trains and high-capacity goods rolling stock, many new locomotives were built and others purchased. In recent years there has been a significant development of diesel-electric traction and the number of diesel-electric locomotives in service has risen from two at 30th June, 1949 to 367 at 30th June, 1958.

3. **Distances between Capital Cities.**—The distances by rail between the capital cities of Australia are published in the annual bulletin, *Transport and Communication*.

4. **Government Railways Development.**—In spite of the great extensions of State railways since 1875 and the construction of various railways by the Commonwealth Government, there are still, in some States, immense areas of country which are as yet practically undeveloped, and in which little in the nature of permanent settlement has been accomplished. The general policy of the States was to extend the existing lines inland in the form of light railways as settlement increased, and while it is true that lines which were not likely to be commercially successful in the immediate future were constructed from time to time for the purpose of encouraging settlement, the general principle that the railways should be self-supporting was kept in view.

The greatest recorded route-mileage of government railways was 27,234 at 30th June, 1941. Although short lengths of line have been opened since that date, most railway construction is being confined to the duplication and electrification of existing main lines. The closure of other lines (mainly developmental branch lines whose retention would have been uneconomic), especially in Victoria and Western Australia, has resulted in a considerable decrease in route-mileage. Variations in route-mileage in each State and Territory during the ten years ended 30th June, 1958 are shown in the following table.

**GOVERNMENT RAILWAYS : VARIATIONS IN ROUTE-MILEAGE, 1948 TO 1958.**

State or Territory.	Route-mileage at 30th June, 1948.	Variations during Ten Years ended 30th June, 1958 due to—		Route-mileage at 30th June, 1958.
		Route Miles Opened.	Route Miles Closed.	
New South Wales .. ..	6,369	2	27	6,344
Victoria .. ..	4,484	14	338	4,160
Queensland .. ..	6,560	..	104	6,456
South Australia .. ..	3,799	235	198	3,836
Western Australia .. ..	4,802	16	247	4,571
Tasmania .. ..	644	..	79	565
Northern Territory .. ..	490	..	..	490
Australian Capital Territory ..	5	..	..	5
<b>Australia .. ..</b>	<b>27,153</b>	<b>267</b>	<b>993</b>	<b>26,427</b>

5. **Standardization of Railway Gauges.**—A summary of the report and recommendations relating to the standardization of Australia's railway gauges on the basis of a 4 ft. 8½ in. gauge, made in March, 1945, at the request of the Commonwealth Government by the late Sir Harold Clapp, together with an outline of the agreement between the Commonwealth Government and the States of New South Wales, Victoria and South Australia regarding the standardization of railway gauges in their respective States, was published in Official Year Book No. 37, pages 146-9. The agreement, which was signed in 1946, was ratified by

the Governments of the Commonwealth, of Victoria and of South Australia, but not by the New South Wales Government. After some time had elapsed and New South Wales had failed to ratify the agreement, the Commonwealth Government decided to enter into a separate agreement with South Australia, and the necessary legislation was enacted in 1949 by each Government concerned. The Commonwealth—South Australia Agreement provides for the same standardization work to be carried out in South Australia as would have been carried out had New South Wales ratified the original Commonwealth—Three States Agreement, and that over a period of years the Commonwealth should contribute 70 per cent. and South Australia be responsible for the remaining 30 per cent. of the estimated cost.

As a further step towards standardization, a Committee consisting of members of the Federal Parliament was formed in March, 1956 to ascertain whether a scheme confined to the main trunk routes would be desirable. This Committee recommended in October, 1956 that standard gauge (4 ft. 8½ in.) lines be provided from Wodonga to Melbourne, from Broken Hill to Adelaide via Port Pirie and from Kalgoorlie to Fremantle via Perth. Action to implement these recommendations has been commenced in respect of the Wodonga to Melbourne line. This project envisages the construction of a new 4 ft. 8½ in. track alongside the present 5 ft. 3 in. single track between Wodonga and Mangalore, the conversion of one of the two existing tracks between Mangalore and Albion and a combination of new track and conversion of existing track between Albion and Spencer Street station.

Preparatory work in the field on the uniform gauge between Albury and Melbourne commenced in November, 1957. The work has been concerned with the duplication of bridges, extension of culverts and the establishment of camps. Funds for this project are being advanced by the Commonwealth to enable the work to proceed. An agreement is being prepared between the Commonwealth and the two States, New South Wales and Victoria, whereby the Commonwealth will meet 70 per cent. of the cost of unification and the two states will share equally the remaining 30 per cent.

A map showing the railway systems of Australia according to gauge appears on page 507.

**6. Grafton-South Brisbane Uniform Gauge Line.**—The first step towards uniform gauge railway communication between the capitals of the mainland States was effected in 1930 with the construction of the 4 ft. 8½ in. gauge line from Grafton to South Brisbane. The finance required for the construction was provided by the Commonwealth Government. For details of the agreement between the Commonwealth and New South Wales and Queensland, see Official Year Book No. 31, page 122.

This line is operated by the New South Wales Railways and details of operations in New South Wales are included with those of the New South Wales system. Details of operations on the Queensland portion are included with Queensland railway statistics unless otherwise specified.

**7. Mileage Open for Traffic, all Lines.**—Almost all the railways open for general traffic in Australia are owned and controlled by the State or Commonwealth Governments. Private lines have been laid down for the purpose of opening up forest lands, mining districts or sugar areas. These lines are not generally used for the conveyance of passengers or the public conveyance of goods.

The following table shows the route-mileage of Commonwealth and State lines open in each State and Territory at various periods since the inauguration of railways in Australia in 1854:—

**GOVERNMENT RAILWAYS : ROUTE-MILEAGE OPEN.**  
(Miles.)

At 30th June —	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1855(a) ..	14	2	..	7	..	..	..	..	23
1861(a) ..	73	114	..	56	..	..	..	..	243
1871(a) ..	358	276	218	133	..	45	..	..	1,030
1881(a) ..	996	1,247	800	832	92	45	..	..	4,012
1891 ..	2,182	2,763	2,195	1,666	198	351	145	..	9,500
1901 ..	2,846	3,237	2,801	1,736	1,355	457	145	..	12,577
1911 ..	3,762	3,523	3,868	1,935	2,376	470	145	..	16,079
1921 ..	5,043	4,267	5,752	3,408	3,992	630	199	5	23,296
1931 ..	6,247	4,514	6,529	3,898	4,634	665	317	5	26,809
1941 ..	6,368	4,518	6,567	3,809	4,835	642	490	5	27,234
1951 ..	6,354	4,445	6,560	3,805	4,682	613	490	5	26,954
1958 ..	6,344	4,160	6,456	3,836	4,571	565	490	5	26,427

(a) At 31st December.

At 30th June, 1958, 256 route-miles in Victoria and 213 route-miles in New South Wales were electrified.

The next table shows for each State and Territory the length of government lines open in relation to both population and area at 30th June, 1958.

**GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN AT 30th JUNE, 1958.**  
(Miles.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Route-mileage open ..	6,344	4,160	6,456	3,836	4,571	565	490	5	26,427
Per 1,000 of population ..	1.73	1.54	4.55	4.28	6.48	1.68	25.03	0.12	2.68
Per 1,000 square miles ..	20.50	47.34	9.63	10.09	4.68	21.55	0.94	5.32	8.88

8. Classification of Lines according to Gauge, at 30th June, 1958.—The next table shows the route-mileage of government railways open in each State and Territory at 30th June, 1958, classified according to gauge.

**GOVERNMENT RAILWAYS: GAUGES, AT 30th JUNE, 1958.**  
(Route-miles.)

Gauge.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
5 ft. 3 in. ..	(a) 241	4,126	..	1,651	..	..	..	..	6,018
4 ft. 8½ in. ..	6,103	..	(b) 69	(c) 871	(c) 454	..	..	(c) 5	7,502
3 ft. 6 in. ..	..	..	6,357	(d) 1,314	4,117	565	(c) 490	..	12,843
2 ft. 6 in. ..	..	34	..	..	..	..	..	..	34
2 ft. 0 in. ..	..	..	30	..	..	..	..	..	30
<b>Total ..</b>	<b>6,344</b>	<b>4,160</b>	<b>6,456</b>	<b>3,836</b>	<b>4,571</b>	<b>565</b>	<b>490</b>	<b>5</b>	<b>26,427</b>

(a) Portion of Victorian system. (b) Queensland section of Grafton-South Brisbane Uniform Gauge Line. (c) Portion of Commonwealth system. (d) Includes 432 miles of Commonwealth system.

9. Summary of Operations.—In the following table a summary is shown of the operations of government railways open in Australia during 1957-58:—

**GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS, 1957-58.**

Particulars.	Commonwealth Railways.	State Railways.	Total.
Route-mileage, 30th June ..	..	..	..
Gross revenue ..	£'000	£'000	£'000
.. .. per revenue train-mile	pence	pence	pence
Working expenses ..	£'000	£'000	£'000
.. .. per revenue train-mile	pence	pence	pence
Net revenue ..	£'000	£'000	£'000
.. .. per revenue train-mile	pence	pence	pence
Revenue train-miles ..	'000	'000	'000
Passenger-journeys ..	'000	'000	'000
Goods and livestock carried ..	'000 tons	'000 tons	'000 tons
Average number of employees(b) ..	..	..	..
.. earnings per employee ..	£	£	£

(a) Excludes amounts paid for Commissioner's salary, government contributions under the Superannuation Act, Accident and Insurance Fund and proportion of salaries of Auditor-General's staff—total, £98,719. (b) Excludes construction staff except in respect of Victoria.

NOTE.—Minus sign (–) denotes loss.

A graph showing the route-mileage and traffic of government railways from 1870 to 1957-58 appears on page 508.

10. Summary, States.—The following table shows, for government railways in Australia, particulars of the mileage open, cost of construction and equipment, passengers and goods carried and train-miles run during 1957-58.

## GOVERNMENT RAILWAYS: SUMMARY, STATES, 1957-58.

Railway System.	Mileage Open.(a)		Cost of Construction and Equipment during Year. (£'000.)	Passenger-journeys. ( <sup>'000.</sup> )	Goods and Livestock Carried. ( <sup>'000 tons.</sup> )	Revenue Train-miles. ( <sup>'000.</sup> )
	Route-miles.	Track-miles.				
New South Wales ..	6,103	8,482	11,599	258,651	(b)18,502	35,020
Victoria ..	4,401	5,804	9,857	167,662	8,892	18,353
Queensland ..	6,456	7,494	6,084	33,665	7,766	19,032
South Australia ..	2,533	3,161	1,996	17,564	4,146	7,081
Western Australia ..	4,117	4,710	3,052	14,106	3,589	7,327
Tasmania ..	565	667	119	2,444	1,096	1,568
Commonwealth ..	2,252	2,449	2,545	238	1,259	1,910
<b>Australia ..</b>	<b>26,427</b>	<b>32,767</b>	<b>35,252</b>	<b>494,330</b>	<b>45,250</b>	<b>90,291</b>

(a) At 30th June.

(b) Partly estimated.

11. **Gross Revenue.**—(i) *General.* The gross revenue is composed of (a) receipts from coaching traffic, including the carriage of mails, horses, parcels, etc., by passenger trains; (b) receipts from the carriage of goods and livestock; and (c) rents and miscellaneous items. State Government grants are excluded. Details of these grants made during 1957-58 are as follows:—£1,000,000 for the working of country development lines and £800,000 to subsidize payments from Superannuation Account in New South Wales; £12,360 recoup on operating the Kerang-Koondrook Tramway in Victoria; and £3,500,000 towards working expenses and £800,000 towards debt charges in South Australia.

(ii) *Coaching, Goods and Miscellaneous Receipts.* (a) *Summary.* In the following table the gross revenue is shown for the years 1955-56 to 1957-58, together with the revenue per average route-mile worked and per revenue train-mile:—

## GOVERNMENT RAILWAYS: GROSS REVENUE.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
<b>TOTAL GROSS REVENUE.</b> (£'000.)								
1955-56 ..	75,386	37,032	31,312	13,098	13,080	2,535	4,741	177,184
1956-57 ..	78,689	37,352	36,678	13,770	13,859	2,534	4,962	187,844
1957-58 ..	74,433	35,954	34,636	13,160	12,788	2,569	5,346	178,886
<b>GROSS REVENUE PER AVERAGE ROUTE-MILE WORKED.</b> (£.)								
1955-56 ..	12,352	8,322	5,961	5,108	3,175	4,260	2,154	6,689
1956-57 ..	12,894	8,441	5,681	5,398	3,367	4,333	2,172	7,083
1957-58 ..	12,195	8,168	5,365	5,193	3,106	4,492	2,370	6,766
<b>GROSS REVENUE PER REVENUE TRAIN-MILE.</b> (Pence.)								
1955-56 ..	470.21	476.94	389.60	441.92	379.21	288.98	487.04	441.88
1956-57 ..	509.99	483.42	438.94	459.80	401.80	328.00	557.51	474.12
1957-58 ..	510.11	470.15	436.78	446.05	418.89	393.28	671.57	475.49

(a) Excludes government grants; see para. 11 (i) above

(b) *Distribution.* The following table shows the gross revenue for the year 1957-58 classified according to the main three sources of receipts.

**GOVERNMENT RAILWAYS : DISTRIBUTION OF GROSS REVENUE(a), 1957-58.**

Railway System.	Gross Revenue. (£'000.)			Proportion of Total. (Per Cent.)		
	Coaching.	Goods and Livestock.	Miscellaneous.	Coaching.	Goods and Livestock.	Miscellaneous.
New South Wales ..	22,401	48,229	3,803	30.10	64.79	5.11
Victoria ..	12,482	20,849	2,623	34.71	57.99	7.30
Queensland ..	4,985	28,587	1,064	14.39	82.54	3.07
South Australia ..	1,944	10,302	914	14.77	78.28	6.95
Western Australia ..	1,538	10,506	744	12.03	82.16	5.81
Tasmania ..	196	2,290	83	7.64	89.14	3.22
Commonwealth ..	971	4,006	369	18.16	74.93	6.91
<b>Australia ..</b>	<b>44,517</b>	<b>124,769</b>	<b>9,600</b>	<b>24.88</b>	<b>69.75</b>	<b>5.37</b>

(a) Excludes government grants; see para. 11 (i) on p. 522.

12. *Working Expenses.*—(i) *General.* In order to make an adequate comparison of the working expenses as between the several States and Territories, allowance should be made for the variation of gauges and of physical and traffic conditions, not only on the different systems of the State and Commonwealth railways, but also on different portions of the same system. When traffic is light, the proportion of working expenses to revenue is naturally greater than when traffic is heavy; and this is especially true in Australia, where ton-mile rates are in many cases based on a tapering principle—i.e., a lower rate per ton-mile is charged upon merchandise from remote interior districts—and where on many of the lines there is but little back loading.

Working expenses, wherever presented in the Railways section of this chapter, exclude interest, sinking fund, exchange and certain other payments (see paras. 13 and 14 following).

(ii) *Working Expenses.* The following table shows the total working expenses, the ratio of working expenses to gross revenue and working expenses per average route-mile worked and per revenue train-mile for the years 1955-56 to 1957-58:—

**GOVERNMENT RAILWAYS : WORKING EXPENSES.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	W'wealth. (a)	Aust.
<b>TOTAL WORKING EXPENSES.</b> (£'000.)								
1955-56 ..	74,904	38,026	33,873	15,761	15,920	3,262	3,176	184,922
1956-57 ..	75,352	39,118	37,790	15,977	17,076	3,447	3,597	192,357
1957-58 ..	72,534	38,174	36,894	15,953	16,091	3,218	3,611	186,475
<b>RATIO OF WORKING EXPENSES TO GROSS REVENUE.</b> (Per Cent.)								
1955-56 ..	99.36	102.68	108.18	120.33	121.71	128.69	66.99	104.36
1956-57 ..	95.76	104.73	103.03	116.03	123.21	136.01	72.50	102.40
1957-58 ..	97.45	106.17	106.52	121.23	125.83	125.24	67.55	104.24
<b>WORKING EXPENSES PER AVERAGE ROUTE-MILE WORKED.</b> (£.)								
1955-56 ..	12,273	8,545	5,247	6,146	3,864	5,482	1,443	6,981
1956-57 ..	12,347	8,840	5,853	6,263	4,148	5,893	1,575	7,253
1957-58 ..	11,884	8,672	5,715	6,296	3,908	5,625	1,601	7,053

(a) See para. 9, note (a), p. 521.

GOVERNMENT RAILWAYS: WORKING EXPENSES—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth. (a)	Aust.
WORKING EXPENSES PER REVENUE TRAIN-MILE. (Pence.)								
1955-56 ..	467.21	489.74	421.46	531.75	461.55	371.89	326.26	461.18
1956-57 ..	488.36	506.28	452.24	533.49	495.07	446.12	404.20	485.52
1957-58 ..	497.09	499.18	465.25	540.73	527.06	492.53	453.67	495.67

(a) See para. 9, note (a), p. 521.

(iii) *Distribution.* The following table shows the total working expenses for the year 1957-58 classified according to the main four expenditure headings.

GOVERNMENT RAILWAYS: DISTRIBUTION OF WORKING EXPENSES, 1957-58.  
(£'000.)

Railway System.	Mainten- ance of Way and Works.	Motive Power.(a)	Traffic.	Other Charges.	Total Working Expenses.
New South Wales ..	12,755	29,557	17,329	12,893	72,534
Victoria ..	7,997	11,261	10,112	8,804	38,174
Queensland ..	9,606	17,357	7,879	2,052	36,894
South Australia(b) ..	3,316	7,368	3,632	1,637	15,953
Western Australia(b) ..	2,694	7,176	3,359	2,862	16,091
Tasmania(b) ..	763	1,306	699	450	3,218
Commonwealth(c) ..	1,306	1,203	799	303	3,611
<b>Australia ..</b>	<b>38,437</b>	<b>75,228</b>	<b>43,809</b>	<b>29,001</b>	<b>186,475</b>

(a) Includes maintenance of rolling stock. (b) Includes provision of reserves for depreciation.  
(c) See para. 9, note (a), p. 521.

13. *Net Revenue.*—The following table shows, for the years 1955-56 to 1957-58, the net revenue, i.e., the excess of gross revenue over working expenses, the amount of such net revenue per average route-mile worked and per revenue train-mile, the interest on railway loan expenditure and the profit or loss after paying interest:—

## GOVERNMENT RAILWAYS: NET REVENUE, INTEREST, AND PROFIT OR LOSS.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
TOTAL NET REVENUE. (£'000.)								
1955-56 ..	482	— 994	— 2,561	— 2,663	— 2,840	— 727	(a) 1,565	— 7,738
1956-57 ..	3,337	— 1,766	— 1,112	— 2,207	— 3,217	— 913	(a) 1,365	— 4,513
1957-58 ..	1,899	— 2,220	— 2,258	— 2,793	— 3,303	— 649	(a) 1,735	— 7,589
NET REVENUE PER AVERAGE ROUTE-MILE WORKED. (£.)								
1955-56 ..	79	— 223	— 397	— 1,038	— 689	— 1,222	(a) 711	— 292
1956-57 ..	547	— 399	— 172	— 865	— 781	— 1,560	(a) 597	— 170
1957-58 ..	311	— 504	— 350	— 1,103	— 802	— 1,133	(a) 769	— 287
NET REVENUE PER REVENUE TRAIN-MILE. (Pence.)								
1955-56 ..	3.00	—12.80	—31.86	— 89.83	— 82.34	— 82.91	(a)160.78	—19.30
1956-57 ..	21.63	—22.86	—13.30	— 73.69	— 93.27	—118.12	(a)153.31	—11.39
1957-58 ..	13.02	—29.03	—28.47	— 94.68	—108.17	— 99.25	(a)217.90	—20.18

NOTE.—For footnotes see next page.

GOVERNMENT RAILWAYS: NET REVENUE, INTEREST, AND PROFIT OR LOSS  
—continued.

Year.	N.S.W.	Vic.	Q'land.	S.Aust.	W.Aust.	Tas.	C'wealth.	Aust.
<b>INTEREST PAYMENTS.</b> (£'000.)								
1955-56 ..	8,032	2,874	2,630	1,471	1,721	322	(b) 385	17,435
1956-57 ..	9,071	3,022	2,970	(b)1,621	2,053	348	(b) 383	19,468
1957-58 ..	10,045	3,283	3,263	(b)1,812	2,112	368	(b) 388	21,271
<b>NET PROFIT OR LOSS.</b> (£'000.)								
1955-56 ..	- 7,550	- 3,868	- 5,191	- 4,134	- 4,561	- 1,049	(a)1,180	- 25,173
1956-57 ..	- 5,734	- 4,788	- 4,082	- 3,828	- 5,270	- 1,261	(a) 982	- 23,981
1957-58 ..	- 8,146	- 5,503	- 5,521	- 4,605	- 5,415	- 1,017	(a)1,347	- 28,860

(a) See para. 9, note (a), p. 521. (b) Includes exchange.  
NOTE.—Minus sign (-) denotes loss.

A graph showing the gross and net revenue and working expenses from 1870 to 1957-58 appears on page 509.

14. Exchange.—Exchange on interest payments abroad and certain other charges are not debited against the railways in Queensland and Western Australia. For the purposes of comparison, these items have been excluded wherever possible from the table above. However, for South Australia these charges are included with interest rates.

In the remaining States the amounts paid on account of exchange during 1957-58 were:—New South Wales, £478,128; Victoria, £123,016; and Tasmania, £3,316.

15. Traffic.—(i) *General.* Reference has already been made to the difference in the traffic conditions on many of the lines. These conditions differ not only in the several State and Commonwealth systems, but also on different lines in the same system, and apply to both passenger and goods traffic. By far the greater part of the population of Australia is located in a fringe of country near the coast, more especially in the eastern and southern districts. A large proportion of the railway traffic between the chief centres of population is therefore carried over lines in the neighbourhood of the coast, and is thus, in some cases, open to seaborne competition. In recent years, competition from road and air transport has become an important factor.

The following table shows particulars of railway traffic for the years 1955-56 to 1957-58:—

GOVERNMENT RAILWAYS: TRAFFIC.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
<b>PASSENGER-JOURNEYS (SUBURBAN AND COUNTRY).</b> ( <sup>'000.</sup> )								
1955-56 ..	280,470	166,708	35,647	16,434	12,271	2,977	230	514,737
1956-57 ..	263,137	167,405	34,270	17,407	13,271	2,813	213	498,516
1957-58 ..	258,651	167,662	33,665	17,564	14,106	2,444	238	494,330
<b>PASSENGER-JOURNEYS (SUBURBAN AND COUNTRY) PER AVERAGE ROUTE-MILE WORKED.</b> (Number.)								
1955-56 ..	45,956	37,462	5,522	6,410	2,979	5,003	104	19,433
1956-57 ..	43,116	37,832	5,308	6,823	3,223	4,809	93	18,797
1957-58 ..	42,381	38,088	5,214	6,931	3,426	4,273	106	18,696

GOVERNMENT RAILWAYS: TRAFFIC—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Total.
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GOODS AND LIVESTOCK CARRIED.  
(<sup>000</sup> Tons.)

		(a)							
1955-56	..	18,787	9,607	8,180	4,414	3,793	1,075	918	46,774
1956-57	..	18,791	9,381	8,453	4,498	4,223	1,061	1,069	47,476
1957-58	..	18,502	8,892	7,766	4,146	3,589	1,096	1,259	45,250

GOODS AND LIVESTOCK CARRIED PER AVERAGE ROUTE-MILE WORKED.  
(Tons.)

1955-56	..	3,176	2,159	1,315	1,722	921	1,807	417	1,766
1956-57	..	3,079	2,120	1,309	1,763	1,026	1,814	468	1,790
1957-58	..	3,032	2,020	1,203	1,636	872	1,916	558	1,711

(a) Partly estimated.

(ii) *Passenger Traffic.* With the exception of the Commonwealth Railway Systems, which operate only country services, all systems provide both suburban and country passenger services. Traffic classed as "suburban" moves between stations within a classified suburban area around each capital city, whilst traffic classed as "country" originates or terminates at stations outside of this suburban area. Particulars of suburban and country passenger traffic are shown separately in the two tables following.

(a) *Suburban Passenger Traffic.* The following table shows a summary of suburban passenger operations for the years 1955-56 to 1957-58. Most of the suburban services in New South Wales and Victoria are operated within electrified areas.

## GOVERNMENT RAILWAYS : SUBURBAN PASSENGER SUMMARY.

Year.	Suburban Passenger-journeys.	Suburban Passenger Train-miles.	Suburban Passenger-miles.	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey.	Suburban Passenger Earnings.			
						Gross.	Per Passenger-journey.	Per Passenger-mile.	Per Passenger Train-mile.
	( <sup>000</sup> .)	( <sup>000</sup> .)	( <sup>000</sup> .)		(Miles.)	(£ <sup>000</sup> .)	(Pence.)	(Pence.)	(Pence.)

## NEW SOUTH WALES.

1955-56	a 269,000	11,886	} (b)	(b)	(b)	(b)	(b)	(b)	(b)
1956-57	a 252,000	11,618							
1957-58	244,188	11,158							

## VICTORIA.

1955-56	161,124	8,298	1,379,610	166	8.56	7,005	10.43	1.22	203
1956-57	162,255	8,291	1,416,115	171	8.73	7,647	11.31	1.30	221
1957-58	162,632	8,353	1,433,794	172	8.82	7,613	11.24	1.27	219

## QUEENSLAND.

1955-56	29,748	2,019	} (b)	(b)	(b)	749	6.05	(b)	89
1956-57	28,783	2,070				882	7.36	(b)	102
1957-58	28,524	2,082				890	7.49	(b)	103

## SOUTH AUSTRALIA.

1955-56	15,061	1,778	140,906	79	9.36	567	9.04	0.97	77
1956-57	15,995	1,935	152,021	79	9.50	603	9.04	0.95	75
1957-58	16,390	2,065	165,483	80	10.10	702	10.28	1.02	82

(a) Estimated. (b) Not available.

NOTE.—Train-miles refer to revenue mileages only.

GOVERNMENT RAILWAYS: SUBURBAN PASSENGER SUMMARY—*continued.*

Year.	Suburban Passenger-journeys. (‘000.)	Suburban Passenger Train-miles. (‘000.)	Suburban Passenger-miles. (‘000.)	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey. (Miles.)	Suburban Passenger Earnings.			
						Gross. (£’000.)	Per Passenger-journey. (Pence.)	Per Passenger-mile. (Pence.)	Per Passenger Train-mile. (Pence.)
WESTERN AUSTRALIA.									
1955-56	11,481	1,290	80,408	62	5.79	362	7.56	1.08	67
1956-57	12,497	1,303	86,102	66	6.89	391	7.52	1.09	72
1957-58	13,353	1,323	91,755	69	6.87	420	7.54	1.10	76

TASMANIA.

1955-56	2,443	250	13,568	54	5.55	47	4.66	0.84	46
1956-57	2,345	213	13,279	62	5.66	58	5.96	1.05	66
1957-58	2,122	204	12,895	63	6.08	54	6.14	1.01	64

NOTE.—Train-miles refer to revenue mileages only.

(b) *Country Passenger Traffic.* The following table shows a summary of country passenger operations for the years 1955-56 to 1957-58.

GOVERNMENT RAILWAYS : COUNTRY PASSENGER SUMMARY.

Year.	Country Passenger-journeys. (‘000.)	Country Passenger Train-miles. (a) (‘000.)	Country Passenger-miles. (‘000.)	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey. (Miles.)	Country Passenger Earnings.				
						Gross. (£’000.)	Per Passenger-journey. (Pence.)	Per Passenger-mile. (Pence.)	Per Passenger Train-mile. (Pence.)	
NEW SOUTH WALES.										
1955-56	(b)11,470	10,685	(c)	(c)	(c)	(c)	(c)	(c)	(c)	
1956-57	(b)11,137	10,306								
1957-58	14,463	9,762								
VICTORIA.										
1955-56	5,584	4,653	459,828	98	82.34	3,789	162.83	1.98	195	
1956-57	5,150	4,709	437,481	93	84.95	3,717	173.25	2.04	189	
1957-58	5,030	4,682	418,012	89	83.10	3,493	166.64	2.01	179	
QUEENSLAND.										
1955-56	5,899	5,142	(c)	(c)	(c)	(c)	2,524	102.68	(c)	106
1956-57	5,487	5,183								
1957-58	5,141	4,935								
SOUTH AUSTRALIA.										
1955-56	1,373	2,154	125,088	55	91.08	802	140.13	1.54	85	
1956-57	1,412	2,133	121,135	54	85.81	795	135.14	1.57	85	
1957-58	1,174	2,112	112,781	52	96.05	803	164.18	1.71	89	
WESTERN AUSTRALIA.										
1955-56	790	1,677	82,813	47	104.85	678	205.95	1.96	97	
1956-57	774	1,645	80,700	49	104.32	685	212.58	2.04	100	
1957-58	753	1,565	80,171	51	106.41	670	213.51	2.01	103	

NOTE.—For footnotes see next page.

GOVERNMENT RAILWAYS: COUNTRY PASSENGER SUMMARY—*continued.*

Year.	Country Passenger-journeys. (‘000.)	Country Passenger Train-miles. (a) (‘000.)	Country Passenger-miles. (‘000.)	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey. (Miles.)	Country Passenger Earnings.			
						Gross. (£‘000.)	Per Passenger-journey. (Pence.)	Per Passenger-mile. (Pence.)	Per Passenger Train-mile. (Pence)

## TASMANIA.

1955-56	534	766	19,528	25	36.59	115	51.92	1.42	35
1956-57	468	560	17,476	30	37.31	106	54.07	1.45	43
1957-58	322	367	14,471	37	44.91	91	67.53	1.50	55

## COMMONWEALTH.(d)

1955-56	230	762	86,514	103	376.97	710	742.69	1.97	203
1956-57	213	725	83,984	104	393.95	741	834.47	2.12	220
1957-58	238	718	81,038	113	339.63	736	740.52	2.18	247

(a) Excludes mixed train-miles. (b) Estimated. (c) Not available. (d) Railways controlled by Commonwealth Government.

NOTE.—Train-miles refer to revenue mileages only.

(iii) *Freight Traffic.* (a) *Commodities Carried and Revenue.* Some indication of the differing conditions of the traffic in each system may be gained from an examination of the tonnage of the various classes of commodities carried, and of the revenue derived therefrom. The following table shows the quantities of various commodities carried during 1957-58 and the revenue received.

## GOVERNMENT RAILWAYS: COMMODITIES CARRIED AND REVENUE, 1957-58

Railway System.	Coal, Coke and Shale.	Other Minerals.	Flour and Agricultural Produce.	Wool.	Live-stock.	All Other Commodities.	Total.
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QUANTITY CARRIED.  
(‘000 Tons.)

New South Wales ..	(a)	(a)	(b) 670	(c) 193	(c) 700	16,939	18,502
Victoria ..	2,461	105	1,642	151	507	4,026	8,892
Queensland ..	(d) 1,683	(e) 819	2,775	65	831	1,593	7,766
South Australia ..	121	1,179	861	48	240	1,697	4,146
Western Australia ..	539	245	1,076	62	134	1,533	3,589
Tasmania ..	244	43	33	4	29	743	1,096
Commonwealth ..	703	101	5	5	87	358	1,259
<b>Australia ..</b>	<b>(f)</b>	<b>(f)</b>	<b>(f)</b>	<b>528</b>	<b>2,528</b>	<b>26,889</b>	<b>45,250</b>

REVENUE.  
(£‘000.)

New South Wales ..	7,069	(a)	(a)	(a)	3,736	37,424	48,229
Victoria ..	3,091	107	3,589	771	1,521	11,770	20,849
Queensland ..	(g) 2,862	(h) 2,582	5,233	1,209	4,218	12,483	28,587
South Australia ..	124	3,151	1,278	276	804	4,669	10,302
Western Australia ..	1,006	529	2,159	369	400	6,043	10,506
Tasmania ..	568	82	75	15	78	1,472	2,290
Commonwealth ..	1,142	229	11	25	255	2,344	4,006
<b>Australia ..</b>	<b>15,862</b>	<b>(f)</b>	<b>(f)</b>	<b>(f)</b>	<b>11,012</b>	<b>76,205</b>	<b>124,769</b>

(a) Included with "All other Commodities". (b) Wheat only. (c) Estimated. (d) Excludes shale. (e) Includes shale. (f) Not available. (g) Excludes revenue from shale. (h) Includes revenue from shale

(b) *Freight Summary.* A summary of freight traffic on each railway system for each of the years 1955-56 to 1957-58 is shown in the following table.

GOVERNMENT RAILWAYS : FREIGHT SUMMARY.

Year.	Revenue Goods Train-miles. (a)	Revenue Net Ton-miles.	Average Train Load (Paying Traffic).	Average Haul per Ton.	Goods and Livestock Earnings.				Density of Traffic. (b)
					Gross.	Per Average Route-mile Worked.	Per Revenue Net Ton-mile.	Per Revenue Goods Train-mile.	
	('000.)	('000.)	(Tons.)	(Miles.)	(£'000.)	(£)	(Pence.)	(Pence.)	
NEW SOUTH WALES.									
1955-56	15,104	c2,942,192.(c)	188	(c) 157	51,963	8,514	4.24	797	c 482,089
1956-57	14,317	c2,929,338.(c)	197	(c) 156	51,956	8,513	4.26	840	c 479,983
1957-58	13,290	c2,571,166.(c)	186	(c) 139	48,229	7,902	4.50	837	c 421,295
VICTORIA.									
1955-56	5,638	1,324,877	234	138	22,635	5,086	4.10	958	297,725
1956-57	5,502	1,317,393	238	140	22,110	4,997	4.25	961	297,716
1957-58	5,286	1,260,136	238	142	20,849	4,736	3.98	945	286,265
QUEENSLAND.(d)									
1955-56	10,340	1,387,331	121	176	25,140	3,936	4.35	527	217,212
1956-57	11,065	1,480,694	122	182	29,844	4,673	4.84	590	231,829
1957-58	10,304	1,326,030	114	177	27,974	4,380	5.06	578	207,614
SOUTH AUSTRALIA.									
1955-56	2,865	643,801	209	146	10,350	4,037	3.86	808	251,092
1956-57	2,811	648,397	215	144	10,990	4,308	4.07	874	254,174
1957-58	2,638	611,032	214	147	10,302	4,065	4.05	867	241,133
WESTERN AUSTRALIA.									
1955-56	5,311	608,418	115	160	10,989	2,668	4.33	497	147,710
1956-57	5,330	667,695	125	158	11,698	2,841	4.20	527	162,180
1957-58	4,440	572,176	129	159	10,506	2,552	4.41	568	138,979
TASMANIA									
1955-56	1,031	101,210	95	94	2,246	3,774	5.32	504	170,100
1956-57	999	100,274	95	95	2,240	3,829	5.36	510	171,409
1957-58	919	102,164	105	93	2,290	4,004	5.38	566	178,609
COMMONWEALTH.(e)									
1955-56	1,340	265,790	178	289	3,437	1,561	3.10	551	120,759
1956-57	1,159	293,382	221	274	3,626	1,588	2.97	656	128,451
1957-58	918	341,721	286	272	4,006	1,776	2.81	804	151,472

(a) Excludes mixed train-miles. (b) Total ton-miles per average route-mile worked. (c) Partly estimated. (d) Excludes Queensland portion of Grafton-South Brisbane (Uniform Gauge) Line. (e) Railways controlled by the Commonwealth Government.

16. **Rolling Stock.**—The following table shows the number of rolling stock of Government railways at 30th June, 1958.

**GOVERNMENT RAILWAYS : ROLLING STOCK(a) AT 30th JUNE, 1958.**

Railway System.	Locomotives.				Coaching Stock.(b)	Goods Stock.	Service Stock.
	Steam.	Diesel-electric.	Other.	Total.			
New South Wales ..	1,085	61	45	1,191	3,668	25,103	951
Victoria ..	431	(c) 77	43	(c) 551	(d)2,464	21,195	(e)1,378
Queensland ..	767	58	6	831	1,537	26,809	1,319
South Australia ..	282	35	..	317	(d) 702	8,319	(e) 476
Western Australia ..	328	66	10	404	591	11,256	1,019
Tasmania ..	81	32	9	122	153	(f) 2,700	112
Commonwealth ..	103	38	..	141	187	2,038	474
<b>Australia ..</b>	<b>3,077</b>	<b>(c) 367</b>	<b>113</b>	<b>(c)3,557</b>	<b>(g)9,358</b>	<b>97,420</b>	<b>(g)5,730</b>

(a) Included in capital account. (b) Includes all brake vans. (c) Includes 3 locomotives on hire. (d) Excludes 56 interstate coaching stock owned jointly by Victoria and South Australia. (e) Excludes one dynamometer car owned jointly by Victoria and South Australia. (f) Includes 44 privately-owned goods stock vehicles. (g) Includes stock owned jointly by Victoria and South Australia.

17. **Accidents.**—The following table shows particulars of the number of persons killed or injured through train accidents and the movement of rolling stock on the government railways of Australia during 1957-58 :—

**GOVERNMENT RAILWAYS: ACCIDENTS(a), 1957-58.**

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	C'wth.	Aust.
Persons killed ..	50	28	13	13	11	6	1	122
Persons injured ..	756	531	111	75	165	6	27	1,671

(a) Excludes accidents to railway employees.

18. **Consumption of Coal, Oil and Petrol.**—The following table shows the quantities of coal, oil and petrol consumed by the various government railways during 1957-58 :—

**GOVERNMENT RAILWAYS : COAL, OIL AND PETROL CONSUMED, 1957-58.**

Railway System.	Coal.		Oil.				Petrol for Rail Cars.
	Locomotives.	Other Purposes.	Diesel Oil.(a)	Fuel Oil.(b)	Lubrication.	Other Purposes.	
	'000 tons.	'000 tons.	'000 gal.	'000 gal.	'000 gal.	'000 gal.	'000 gal.
New South Wales ..	1,125	14	6,372	7,377	404	580	12
Victoria ..	139	3	7,307	7,428	383	1,653	1
Queensland ..	547	10	4,931	..	252	645	235
South Australia ..	129	6	3,889	11,136	(c)	(c)	110
Western Australia ..	256	3	3,196	148	289	1,334	42
Tasmania ..	20	1	918	..	45	133	..
Commonwealth ..	1	1	3,156	7	93	556	4
<b>Australia ..</b>	<b>2,217</b>	<b>38</b>	<b>29,769</b>	<b>26,296</b>	<b>(d) 1,466</b>	<b>(d) 4,901</b>	<b>404</b>

(a) Used in internal combustion engines of locomotives and rail cars. (b) Used in oil-fired furnaces of steam locomotives. (c) Not available. (d) Excludes South Australia.

19. **Staff Employed and Salaries and Wages Paid.**—The following table shows details of the average staff employed and the salaries and wages paid by the government railways of Australia during 1957-58.

**GOVERNMENT RAILWAYS : AVERAGE NUMBER OF EMPLOYEES AND SALARIES AND WAGES PAID, 1957-58.**

Railway System.	Operating Staff.			Construction Staff.			Total Salaries and Wages Paid. (£'000.)	Average Earnings Per Employee. (£.)
	Salaried.	Wages.	Total.	Salaried.	Wages.	Total.		
New South Wales ..	9,537	43,333	52,870	5	48	53	52,171	986
Victoria ..	(a)5,297	(a)24,800	(a)30,097	(b)	(b)	(b)	29,049	965
Queensland ..	4,523	24,570	29,093	38	1,018	1,056	27,632	950
South Australia ..	1,871	8,191	10,062	8	992	1,000	10,541	953
Western Australia ..	2,048	11,226	13,274	(c)	(c)	(c)	12,010	905
Tasmania ..	353	2,081	2,434	30	189	219	2,323	876
Commonwealth ..	402	2,196	2,598	5	122	127	2,730	1,002
<b>Australia ..</b>	<b>d 24,031</b>	<b>d 116,397</b>	<b>d 140,428</b>	<b>86</b>	<b>2,369</b>	<b>2,455</b>	<b>136,456</b>	<b>955</b>

(a) Included construction staff. (b) Included with operating staff. (c) Construction work is carried out by private contractors and the staff engaged is therefore not under the control of the Railway Commissioner. (d) Includes construction staff, Victoria.

**C. TRAMWAY AND TROLLEY-BUS SERVICES.**

1. **Systems in Operation.**—(i) *General.* Tramway systems are in operation in all the State capital cities and in a number of the larger towns of Australia. Since 1st April, 1947, all systems have been operated by government or municipal authorities. Tramway systems are located in the following cities—New South Wales, Sydney; Victoria, Melbourne, Bendigo and Ballarat; Queensland, Brisbane; South Australia, Adelaide; Western Australia, Perth; and Tasmania, Hobart. In Sydney, Brisbane, Adelaide, Perth and Hobart, tramway systems are supplemented by trolley-bus services. All systems are electric.

In many parts of Australia, private lines used for special purposes in connexion with the timber, mining, sugar, or other industries are often called tramways, but they are more properly railways and the traffic on them has nothing in common with that of the street tramways for the conveyance of passengers, which are dealt with in the present section.

(ii) *Total Mileage Open and Classification of Lines.* The following table shows, for each State, the total route-mileage of tramway lines open for general passenger traffic at 30th June, 1958, classified (a) according to the controlling authority; (b) according to gauge. Trolley-bus route-mileage also is shown.

**TRAMWAY AND TROLLEY-BUS SERVICES : ROUTE-MILEAGE OPEN AT 30th JUNE, 1958.**

(Miles.)

Particulars—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>ACCORDING TO CONTROLLING AUTHORITY.</b>							
Government ..	69	170	..	60	26	47	372
Municipal ..	..	..	85	..	..	..	85
<b>Total ..</b>	<b>69</b>	<b>170</b>	<b>85</b>	<b>60</b>	<b>26</b>	<b>47</b>	<b>457</b>
<b>ACCORDING TO GAUGE.</b>							
Tramways—							
5 ft. 3 in. ..	..	4	..	..	..	..	4
4 ft. 8½ in. ..	63	166	66	37	..	..	332
3 ft. 6 in. ..	..	..	..	..	4	5	9
Trolley-buses ..	6	..	19	23	22	42	112
<b>Total ..</b>	<b>69</b>	<b>170</b>	<b>85</b>	<b>60</b>	<b>26</b>	<b>47</b>	<b>457</b>

2. **Summary of Operations, Australia.**—The following table gives a summary of the working of all tramway systems in Australia for the years 1953–54 to 1957–58 :—

**TRAMWAY AND TROLLEY-BUS SERVICES : SUMMARY OF OPERATIONS, AUSTRALIA.(a)**

Particulars.		1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Average mileage open for traffic ..	route-miles(b)	529	527	528	505	487
	track-miles	992	994	991	947	898
Tramcars(c) .. .. .	..	2,714	2,626	2,619	2,416	2,100
Net increase in capital equipment during year(d) .. .. .	£'000	861	910	1,034	644	306
Gross revenue(d)(e) .. .. .	£'000	15,780	15,267	15,878	17,267	15,235
Working expenses(d)(f) .. .. .	£'000	18,181	17,797	18,558	18,148	16,425
Net revenue(d) .. .. .	£'000	- 2,401	- 2,530	- 2,680	- 881	- 1,190
Interest(d) .. .. .	£'000	656	702	835	897	961
Ratio of working expenses to gross revenue(d) .. .. .	per cent.	115.22	116.57	116.88	105.10	107.81
Car-miles .. .. .	'000	64,186	60,878	58,881	58,137	51,576
Gross revenue per car-mile(d) .. .. .	pence	59.40	60.79	65.69	72.55	72.37
Working expenses per car-mile(d) .. .. .	pence	68.43	70.86	76.78	76.25	78.02
Net revenue per car-mile(d) .. .. .	pence	- 9.03	- 10.07	- 11.09	- 3.70	- 5.65
Passenger-journeys .. .. .	'000	637,289	619,279	593,284	537,700	479,307
Passenger-journeys per car-mile .. .. .	..	9.93	10.17	10.08	9.25	9.29
Average gross revenue per passenger-journey(d) .. .. .	pence	6.01	6.01	6.55	7.88	7.82
Persons employed at end of year(d)(g) .. .. .	..	15,743	15,030	14,499	14,014	12,616
Accidents—						
Persons killed .. .. .	..	(c) 59	(c) 58	42	45	36
„ injured .. .. .	..	(c) 2,993	(c) 3,177	3,077	3,158	2,969

(a) Includes particulars of Hobart and Launceston Omnibus Services except for average mileage open for traffic. Since 1955–56 these services have been under the control of the Metropolitan Transport Trust.

(b) Excludes Hobart and Launceston omnibus services where the average mileages open for the years 1953–54 to 1957–58 were 26, 28, 35, 62, and 85 respectively.

(c) Includes trolley-buses.

(d) Excludes Queensland trolley-buses. (e) Excludes government grants. (f) Includes provision of reserves for depreciation, etc.

(g) Includes motor omnibus employees in South Australia, but excludes a number of employees in New South Wales and Western Australia who cannot be distributed between tramways and omnibuses.

NOTE.—Minus sign (–) denotes loss.

3. **Traffic and Accidents.**—Particulars of the traffic of electric tramways and the accidents which occurred in the movement of rolling stock during 1957–58 are shown for each State in the following table :—

**TRAMWAY AND TROLLEY-BUS SERVICES : TRAFFIC AND ACCIDENTS, 1957-58.**

State.	Average Mileage Open for Traffic.		Tram-cars. (a)	Car-miles. ('000.)	Pas-senger-journeys. ('000.)	Pas-senger-journeys per Car-mile.	Accidents.	
	Route-miles.	Track-miles.					Persons Killed.	Persons Injured.
New South Wales ..	86	165	440	10,500	116,016	11.05	(b) 6	(b) 595
Victoria ..	170	317	854	21,896	203,943	9.31	11	1,262
Queensland ..	85	156	395	8,814	97,269	11.04	11	628
South Australia ..	73	124	170	4,684	24,551	5.24	(c) 8	(c) 317
Western Australia ..	32	58	123	1,416	10,300	7.28	..	109
Tasmania ..	41	78	118	(d) 4,266	(d) 27,228	(d) 6.38	..	(d) 58
<b>Australia ..</b>	<b>487</b>	<b>898</b>	<b>2,100</b>	<b>51,576</b>	<b>479,307</b>	<b>9.29</b>	<b>36</b>	<b>2,969</b>

(a) Includes trolley-buses. (b) Excludes accidents to employees. (c) Includes particulars for Adelaide Municipal Transport Trust omnibus services. (d) Includes particulars of Hobart and Launceston Omnibus Services under the control of the Metropolitan Transport Trust.

4. **State Details.**—The following table shows a summary of the operations of electric tramways in each State for the years 1955–56 to 1957–58.

TRAMWAY AND TROLLEY-BUS SERVICES : SUMMARY OF OPERATIONS.

Year ended 30th June—	Mileage Open for Traffic at 30th June. (Route-miles.)	Net Increase in Capital Equipment during Year. (£'000.)	Gross Revenue. (a) (£'000.)	Working Expenses. (b) (£'000.)	Net Revenue. (£'000.)	In-terest. (£'000.)	Ratio of Working Expenses to Gross Revenue. (Per cent.)	Car-miles. (°000.)	Passenger-journeys. (°000.)	Persons Employed at end of Year.
NEW SOUTH WALES.										
1956..	113	-206	4,231	6,136	-1,905	181	145.03	12,002	174,954	(c)3,923
1957..	103	-215	5,542	6,049	-507	192	109.14	13,500	144,718	(c)3,376
1958..	69	-458	4,405	5,013	-608	192	113.81	10,500	116,016	(d)2,418
VICTORIA.										
1956..	173	886	6,324	6,715	-391	217	106.18	24,082	222,524	5,264
1957..	170	467	6,648	6,756	-108	293	101.63	23,574	213,412	5,399
1958..	170	524	6,324	6,487	-163	315	102.57	21,896	203,943	5,055
QUEENSLAND.										
1956..	85(e)	116(e)	2,431	2,389	(e) 42	(e) 110	e 98.29	10,208	106,959	(e)2,291
1957..	85(e)	87(e)	2,409	2,295	(e) 114	(e) 110	e 95.28	9,395	101,331	(e)2,228
1958..	85(e)	84(e)	2,331	2,220	(e) 111	(e) 114	e 95.25	8,814	97,269	(e)2,178
SOUTH AUSTRALIA.										
1956..	83	142	1,797	2,012	-215	256	111.94	7,225	48,152	(f)1,981
1957..	67	142	1,524	1,709	-185	251	112.09	6,329	40,702	(f)2,025
1958..	60	2	1,019	1,333	-314	285	130.77	4,684	24,551	(f)2,012
WESTERN AUSTRALIA.										
1956..	34	24	436	554	-118	33	126.94	2,039	15,862	427
1957..	33	12	376	479	-103	37	127.48	1,512	11,499	334
1958..	26	24	350	453	-103	35	129.36	1,416	10,300	303
TASMANIA.(g)										
1956..	(h) 30	72	659	752	-93	38	114.16	3,325	24,833	613
1957..	(h) 35	151	768	860	-92	14	111.98	3,827	26,038	652
1958..	(h) 47	130	806	919	-113	20	114.06	4,266	27,228	650
AUSTRALIA.(i)										
1956..	518	1,034	15,878	18,558	-2,680	835	116.88	58,881	593,284	14,499
1957..	493	644	17,267	18,148	-881	897	105.10	58,137	537,700	14,014
1958..	457	306	15,235	16,425	-1,190	961	107.81	51,576	479,307	12,616

(a) Excludes government grants. (b) Includes provision of reserves for depreciation, etc. (c) Excludes administrative staff not distributable between omnibus and tramway services. (d) Excludes 1,191 administrative staff and 601 salaried staff who cannot be distributed between omnibus and tramway services. (e) Excludes trolley-bus services, particulars of which are included with omnibus services. (f) Includes motor omnibus employees of Adelaide Municipal Tramways Trust. (g) Includes particulars of Hobart and Launceston Omnibus Services under the control of the Metropolitan Transport Trust. (h) Tramway and trolley-bus mileage only. At 30th June, 1958, Hobart and Launceston Metropolitan Transport Trust, Omnibus route-mileage was 92 miles. (i) See notes (a) to (h).

D. MOTOR OMNIBUS SERVICES.

1. General.—Motor omnibus services have been in operation for some years in the capital cities and many of the larger towns of Australia. Government and municipal authorities operate certain services and the others are run by private operators; the former are run in conjunction with the existing electric tramway systems.

2. Government and Municipal Services.—(i) *Summary of Operations, States.* The following table gives a summary for the year 1957-58 of the operations of omnibus systems controlled by government and municipal authorities.

**MOTOR OMNIBUS SERVICES: GOVERNMENT AND MUNICIPAL, 1957-58.**

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	A.C.T.	Aust.
Length of route .. miles	514	99	423	82	2,934	702	49	4,803
Omnibuses .. ..	1,434	269	261	327	246	130	63	2,730
Net increase in capital equipment during year .. £'000	1,513	-84 (a)	26	1,109	61 (b)	2	31	2,658
Gross revenue (c) .. £'000	8,510	1,157 (a)	1,040	1,475	1,056 (b)	153	141	13,532
Working expenses .. £'000	9,501	1,482 (a)	1,256	1,535	1,150 (b)	145	211	15,280
Omnibus-miles .. '000	35,134	5,940	5,587	6,779	7,676 (b)	836	965	62,917
Passenger-journeys .. '000	194,071	34,577	30,121	35,532	25,359 (b)	314	3,449	323,423
Persons employed .. ..	(d) 5,755	869 (a)	736	(e)	(d) 119 (b)	41	141 (f)	7,661

(a) Includes Brisbane City Council trolley-bus service. (b) Excludes Hobart and Launceston Metropolitan Transport Trust Omnibus Services. (c) Excludes government grants. (d) Excludes staff not distributable between omnibus and tramway services. (e) Not available; employees are interchangeable with electric tramway employees and are included therewith (see p. 533). (f) See notes applicable to individual States.

NOTE.—Minus sign (-) denotes decrease.

(ii) *Summary of Operations, Australia.* The following table gives a summary of the working of motor omnibus services in Australia under government and municipal control during each of the years 1953-54 to 1957-58.

**MOTOR OMNIBUS SERVICES : GOVERNMENT AND MUNICIPAL, AUSTRALIA.**

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Length of route .. miles	4,612	4,492	4,571	4,869	4,803
Omnibuses .. ..	2,302	2,301	2,392	2,489	2,730
Net increase in capital equipment during year (a)(b) .. £'000	(c) 711	545	765	2,126	2,658
Gross revenue (a)(b) .. £'000	8,853	9,613	9,592	12,206	13,532
Working expenses (a)(b) .. £'000	11,387	12,063	12,970	13,839	15,280
Net revenue (a)(b) .. £'000	-2,534	-2,450	-3,378	-1,633	-1,748
Ratio of working expenses to gross revenue (a)(b) .. per cent.	128.61	125.48	135.22	113.38	112.92
Omnibus-miles (a) .. '000	56,894	57,513	57,809	58,525	62,917
Gross revenue per omnibus-mile (a)(b) .. pence	37.07	39.70	39.23	50.05	50.77
Working expenses per omnibus-mile (a)(b) .. pence	47.68	49.81	53.05	56.75	57.33
Net revenue per omnibus-mile (a)(b) .. pence	-10.61	-10.11	-13.82	-6.70	-6.56
Passenger-journeys (a) .. '000	339,578	346,749	333,761	294,567	323,423
Passenger-journeys per omnibus-mile (a) .. ..	5.97	6.03	5.77	5.03	5.14
Average gross revenue per passenger-journey (a)(b) .. pence	6.12	6.47	6.68	9.95	9.70
Persons employed (d) .. ..	7,308	7,225	7,130	7,291	7,661

(a) Excludes Hobart and Launceston Omnibus Services. Since 1955-56 these services have been under the control of the Metropolitan Transport Trust. (b) Includes Brisbane City Council trolley-bus service. (c) Excludes South Australia. (d) See relevant notes to table above.

NOTE.—Minus sign (-) denotes loss.

3. Private Services.—(i) *General.* Particulars of motor omnibus services under the control of private operators are recorded in the States of New South Wales, Victoria, South Australia and Western Australia only.

In New South Wales, particulars are compiled for the Metropolitan, Newcastle and Wollongong Transport districts only, in Victoria they cover the Metropolitan Area only, but in South Australia and in Western Australia particulars of all services throughout the State are included.

(ii) *Summary of Operations.* The following table shows the operations of motor omnibus services under the control of private operators in New South Wales, Victoria, South Australia and Western Australia during each of the years 1955-56 to 1957-58:—

**MOTOR OMNIBUS SERVICES : PRIVATE.**

Year.	Number of Omnibuses.	Omnibus-miles. ( <sup>c</sup> 000.)	Passenger-journeys. ( <sup>c</sup> 000.)	Value of Plant and Equipment. ( <sup>c</sup> £'000.)	Gross Revenue. ( <sup>c</sup> £'000.)	Persons Employed.
<b>NEW SOUTH WALES.(a)</b>						
1955-56.. ..	808	24,335	96,759	1,384	3,216	1,583
1956-57.. ..	848	24,449	93,761	1,424	3,676	1,635
1957-58.. ..	901	25,385	96,803	1,584	3,722	1,704
<b>VICTORIA.(b)</b>						
1955-56.. ..	467	16,064	78,698	( <sup>c</sup> ) 519	1,994	( <sup>d</sup> ) 735
1956-57.. ..	459	16,094	74,026	655	2,196	732
1957-58(e).. ..	472	15,701	73,020	670	2,219	714
<b>SOUTH AUSTRALIA.(f)</b>						
1955-56.. ..	( <sup>b</sup> ) 113	6,082	13,508	} ( <sup>g</sup> )	{ 707	} ( <sup>g</sup> )
1956-57.. ..	117	6,045	13,254			
1957-58.. ..	113	6,096	12,713			
<b>WESTERN AUSTRALIA.</b>						
1955-56.. ..	372	12,172	32,607	1,125	1,581	827
1956-57.. ..	378	11,801	30,802	1,142	1,594	837
1957-58.. ..	383	11,644	29,881	1,030	1,577	800

(a) Metropolitan, Newcastle and Wollongong transport districts only. (b) Metropolitan area only. (c) Vehicles only. (d) Drivers only. (e) Partly estimated. (f) Services licensed by the Metropolitan Transport Trust and the Transport Control Board. (g) Not available.

**E. FERRY (PASSENGER) SERVICES.**

1. *General.*—Ferry services to transport passengers are operated in the following States—New South Wales, at Sydney and Newcastle; Western Australia, on the Swan River at Perth; Tasmania, on the Derwent River at Hobart, on the Mersey River at Devonport and across D'Entrecasteaux Channel to Bruny Island. Control is exercised both by governmental authorities and by private operators. In Victoria and Queensland the services operated are not extensive, and there are no ferry services in South Australia.

2. *Summary of Operations.*—The operations of ferry passenger services in New South Wales, Western Australia and Tasmania during the years 1955-56 to 1957-58 are summarized in the following table. Particulars of passengers carried on vehicular ferries are not included.

## FERRY (PASSENGER) SERVICES.

Year.	Number of Vessels.	Passenger Accommodation.	Passenger-journeys. (‘000.)	Gross Revenue. (£.)	Persons Employed.
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## NEW SOUTH WALES—SYDNEY AND NEWCASTLE.

1955-56 .. .. .	39	22,696	18,056	741,695	346
1956-57 .. .. .	40	22,950	16,810	875,000	341
1957-58 .. .. .	39	22,179	16,375	846,000	318

## WESTERN AUSTRALIA—PERTH.

1955-56 .. .. .	4	785	437	9,944	10
1956-57 .. .. .	4	785	445	12,836	11
1957-58 .. .. .	4	785	442	13,520	11

## TASMANIA—HOBART AND DEVONPORT.

1955-56 .. .. .	5	1,582	1,034	29,531	33
1956-57 .. .. .	5	1,602	707	29,632	24
1957-58 .. .. .	5	1,602	493	22,399	23

## F. MOTOR VEHICLES.

1. **Motor Industry.**—Chapter VI.—Manufacturing Industry contains summarized information on the motor industry of Australia and includes therein some data on the imports of motor bodies and chassis. Chapter XIII.—Trade contains further data on imports, including those of petroleum products.

2. **Registration.**—The arrangements for the registration of motor vehicles and the licensing of drivers and riders are not uniform throughout Australia. Particulars regarding methods of registration, licences, fees payable, etc., in each State and Territory at 30th June, 1957 were given in Official Year Book, No. 44, pages 407-10.

3. **Taxi-cabs and Other Hire Vehicles.**—In all the capital cities and in many of the provincial centres, taxi-cabs and other vehicles ply for hire under licence granted by either the Commissioner of Police or the local government authority concerned. As most of these vehicles are independently controlled by individuals or small companies, it has not been possible to obtain complete data in respect of their operations.

4. **Motor Omnibuses.**—In both urban and provincial centres, motor omnibus traffic has assumed considerable proportions during recent years and in some States, the railway and tramway systems run motor services complementary to their main services. There has been a considerable replacement also, during the last few years, of existing tramway services by trolley-bus and motor omnibus services. (See pp. 531-5.)

5. **Motor Vehicles on the Register, etc.**—(i) *Registrations and Revenue.* The following table shows particulars of the registration of motor vehicles, licences issued and revenue received for 1957-58 and a summary for Australia for each of the years 1953-54 to 1957-58. It should be noted that in Victoria registration is made on the basis of the purpose for which the vehicle is to be used; consequently, motor car registrations are overstated by the inclusion of commercial vehicles registered for private use.

A graph showing for all motor vehicles other than motor cycles the registrations in force at 30th June of each year from 1925 to 1958 will be found on page 510.

## MOTOR VEHICLES : REGISTRATIONS AND REVENUE.

State or Territory, and Year.	Number of Motor Vehicles Registered at 30th June.(a)				Number of Drivers' and Riders' Licences in force at 30th June.	Gross Revenue derived from—				
	Motor Cars.(b)	Commercial Vehicles.(c)	Motor Cycles.	Total.		Per 1,000 of Population at 30th June.	Vehicle Registrations and Motor Tax. (£'000.)	Drivers' and Riders' etc., Licences. (£'000.)	Other Sources. (£'000.)	Total. (£'000.)
STATES AND TERRITORIES, 1957-58.										
N.S.W. ..	554,488	270,344	34,581	859,413	233	1,149,472	10,492	1,189	1,627	13,308
Victoria (d)	562,362	161,119	24,353	747,834	273	879,779	8,816	440	2,446	11,702
Queensland	206,260	138,736	20,193	365,189	258	(e)	4,850	151	1,031	6,032
S. Aust. ...	173,236	67,755	18,742	259,733	290	306,932	3,393	355	87	3,835
W. Aust. ...	110,573	66,236	12,827	189,636	269	241,212	1,991	148	133	2,272
Tasmania	56,877	24,025	4,018	84,920	253	99,946	1,023	69	140	1,232
Nor. Terr.	3,078	3,965	718	7,761	396	8,821	41	6	1	48
A.C.T. ...	8,764	2,991	451	12,206	296	17,166	93	10	2	105
Australia ..	d1,675,638	d735,171	115,883	2,526,692	257	f2703328	30,699	2,368	5,467	38,534

## SUMMARY, AUSTRALIA.

	(d)	(d)			(f)					
1953-54 ..	1,195,133	611,580	140,614	1,947,327	218	2,148,119	20,450	1,579	4,382	26,411
1954-55 ..	1,341,996	654,674	133,029	2,129,699	231	2,295,854	22,951	1,758	3,764	28,473
1955-56 ..	1,467,252	683,396	125,600	2,276,248	241	2,457,246	24,438	1,875	3,385	29,698
1956-57 ..	1,564,335	707,107	119,963	2,391,405	248	2,575,896	27,379	2,743	4,265	34,387
1957-58 ..	1,675,638	735,171	115,883	2,526,692	257	2,703,328	30,699	2,368	5,467	38,534

(a) Excludes, at 30th June, 1958, trailers (171,406), road tractors, etc. (32,755), and dealers' plates (9,027). (b) Includes taxis and hire cars. (c) Includes utilities, panel vans, lorries, omnibuses, and station wagons. (d) See reference to Victoria above. (e) As from 1st October, 1952, drivers' and riders' licences have not been issued on an annual basis in Queensland. (f) Excludes Queensland.

NOTE.—All Commonwealth-owned vehicles are included except those belonging to the Defence Services. Prior to 1st January, 1956, Department of the Navy vehicles were also included.

(ii) *Relation to Population.* The table following shows the number of vehicles (excluding motor cycles) registered per 1,000 of population in each State and Territory at 31st December, 1921, and at 30th June for each of the years 1939 and 1954 to 1958.

## MOTOR VEHICLES (EXCLUDING MOTOR CYCLES) REGISTERED PER 1,000 OF POPULATION.

Date.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
31st Dec., 1921 ..	15	16	8	24	12	13	(a)	..	(b) 15
30th June, 1939 ..	107	125	118	137	133	96	218	174	118
.. 1954 ..	179	215	199	245	217	193	206	241	201
.. 1955 ..	193	241	216	257	238	212	269	267	220
.. 1956 ..	204	250	224	257	243	223	272	277	228
.. 1957 ..	213	256	232	264	245	231	315	273	236
.. 1958 ..	224	264	243	269	251	241	360	286	245

(a) Not available. (b) Excludes Northern Territory.

NOTE.—See NOTE to previous table.

6. *New Vehicles Registered.*—(i) *States and Territories, 1957-58.* The following table shows the number of new vehicles registered in each State and Territory during 1957-58. A graph showing the number of new motor vehicles (excluding motor cycles) registered during each of the years 1928-29 to 1957-58 will be found on page 510.

## NEW MOTOR VEHICLES REGISTERED, 1957-58.

Vehicles.	N.S.W.	Vic. (a)	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Motor cars(b) ..	57,316	54,198	20,495	16,259	10,142	5,309	273	1,244	165,236
Commercial vehicles, etc.(c) ..	27,256	15,267	10,640	5,668	5,568	1,971	405	364	(a)67,139
Motor cycles ..	3,140	2,308	1,710	1,406	1,702	225	50	63	10,604
<b>Total ..</b>	<b>87,712</b>	<b>71,773</b>	<b>32,845</b>	<b>23,333</b>	<b>17,412</b>	<b>7,505</b>	<b>728</b>	<b>1,671</b>	<b>242,979</b>

(a) See para. 5 on p. 536. (b) Includes taxis and hire cars. (c) Includes utilities, panel vans, lorries, omnibuses and station wagons.

NOTE.—See NOTE to table on p. 537.

(ii) *Australia.* Particulars of the number of new vehicles registered in Australia during each of the years 1953-54 to 1957-58 are shown in the following table :—

## NEW MOTOR VEHICLES REGISTERED: AUSTRALIA.

Vehicles.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Motor cars (a)(b) .. ..	125,595	166,801	163,598	149,695	165,236
Commercial vehicles, etc.(b)(c) .. ..	57,402	67,188	69,312	58,967	67,139
Motor cycles .. ..	10,860	11,282	10,530	9,655	10,604
<b>Total .. ..</b>	<b>193,857</b>	<b>245,271</b>	<b>243,440</b>	<b>218,317</b>	<b>242,979</b>

(a) Includes taxis and hire cars. (b) See para. 5 on p. 536. (c) Includes utilities, panel vans, lorries, omnibuses and station wagons.

NOTE.—See NOTE to table on p. 537.

7. *World Motor Vehicle Statistics, 1957.*—Particulars of motor vehicle registrations in the principal countries of the world may be found in the annual mimeographed publication *Registrations of New Motor Vehicles*. This information is derived from *Automobile Facts and Figures*. For reasons of space, detailed particulars cannot be given here, but the same source shows that in 1957 there were 108,315,000 motor cars, trucks and omnibuses registered in various countries of the world. This was an increase of 6 per cent. on the figure for the previous year, 102,655,000. Of the 1957 registrations, 67,136,000 or 62 per cent. of the world total were in the United States of America, whilst Australian registrations amounted to 2 per cent.

8. *Census of Motor Vehicles, 31st December, 1955.*—Details of this census were published in official Year Book No. 44, page 415.

## G. ROAD TRAFFIC ACCIDENTS.

1. *General.*—Prior to the year 1949-50, it was not possible to make proper comparisons between States of the number of accidents recorded, because of the differences in legislation regarding the reporting of accidents and the degree to which the legislation could be enforced. However, arrangements were made, in co-operation with the Australian Road Safety Council and the various police and transport authorities concerned, to obtain the numbers of road traffic accidents on a comparable basis from all States and the Australian Capital Territory in respect of the year ended 30th June, 1950 and subsequent years. This was achieved by restricting the statistics so that they related only to those accidents which resulted in death or bodily injury to any person, or in damage in excess of £10 to property. It is considered that there was little difference in the recording of accidents as between States for the years 1949-50 to 1953-54, except in the case of Western Australia, where statistics shown related to all accidents which occurred in the metropolitan area and, in the remainder of the State, for periods prior to 1st January, 1953, only to those which involved fatal or "near-fatal" injury. Statistics to 31st December, 1957 were collected on a comparable basis for all States except Tasmania, where, under legislation passed on 10th August, 1954, it

became no longer obligatory to report accidents involving only damage to property. It should be noted, however, that the comparability of the statistics between States even on this basis still depended on the degree to which accidents so defined were in fact recorded by the police. Statistics are not available in respect of road traffic accidents which occur in the Northern Territory.

The series "Total Accidents Recorded" was suspended from 1st January, 1958, due to the inconsistency between States in recording "damage only" accidents and the distortion of the statistics caused by the difficulty of assessing damage to property.

2. **Accidents Involving Casualties.**—(i) *States, 1957-58.* The following table gives a summary of accidents involving casualties in each State and the Australian Capital Territory for the year 1957-58.

**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): ACCIDENTS RECORDED AND CASUALTIES, 1957-58.**

State or Territory.	Accidents Involving Casualties.	Persons Killed.			Persons Injured.		
		Number.	Per 100,000 of Mean Population.	Per 10,000 Motor Vehicles Registered.	Number.	Per 100,000 of Mean Population.	Per 10,000 Motor Vehicles Registered.
New South Wales ..	14,646	794	22	10	19,378	530	232
Victoria ..	9,536	571	21	8	13,035	481	179
Queensland ..	6,565	342	24	10	8,739	623	246
South Australia ..	4,372	200	23	8	5,492	620	215
W. Australia ..	3,338	164	23	9	4,249	608	230
Tasmania ..	779	70	21	8	1,000	299	121
Aust. Cap. Terr. ..	237	5	13	4	320	815	279
<b>Total ..</b>	<b>39,473</b>	<b>2,146</b>	<b>22</b>	<b>9</b>	<b>52,213</b>	<b>537</b>	<b>213</b>

(a) Accidents (reported to the police) which occurred in public thoroughfares and which caused death or injury to persons to an extent requiring surgical or medical treatment.

(ii) *Riders, Drivers, Pedestrians, etc., Killed or Injured.* The following table shows the number of persons killed and the number injured during 1957-58 in each State and the Australian Capital Territory, classified into drivers, riders, pedestrians, etc.

**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): DRIVERS, RIDERS PEDESTRIANS, ETC., KILLED OR INJURED, 1957-58.**

Drivers, Riders, Pedestrians, etc.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
<b>PERSONS KILLED.</b>								
Drivers of Motor Vehicles	192	190	85	63	36	18	3	587
Motor Cyclists ..	60	40	46	19	25	7	1	198
Pedal Cyclists ..	30	36	30	16	13	5	..	130
Passengers (all types)(b) ..	250	120	103	51	42	21	1	588
Pedestrians ..	260	182	77	51	48	19	..	637
Other Classes(c) ..	2	3	1	..	..	..	..	6
<b>Total ..</b>	<b>794</b>	<b>571</b>	<b>342</b>	<b>200</b>	<b>164</b>	<b>70</b>	<b>5</b>	<b>2,146</b>
<b>PERSONS INJURED.</b>								
Drivers of Motor Vehicles	5,247	4,036	2,451	1,473	973	286	95	14,561
Motor Cyclists ..	1,896	748	1,202	934	703	100	31	5,614
Pedal Cyclists ..	1,295	1,056	827	653	404	84	48	4,367
Passengers (all types)(b) ..	7,590	5,275	3,285	1,823	1,485	346	121	19,925
Pedestrians ..	3,257	1,888	952	604	679	183	25	7,588
Other Classes(c) ..	91	32	22	5	5	1	..	156
Not Stated ..	2	..	..	..	..	..	..	2
<b>Total ..</b>	<b>19,378</b>	<b>13,035</b>	<b>8,739</b>	<b>5,492</b>	<b>4,249</b>	<b>1,000</b>	<b>320</b>	<b>52,213</b>

(a) Accidents (reported to the police) which occurred in public thoroughfares and which caused death or injury to persons to an extent requiring surgical or medical treatment. (b) Includes pillion riders.

(c) Includes tram drivers, riders of horses and drivers of animal-drawn vehicles.

(iii) *Ages of Persons Killed or Injured.* The following table shows the age groups of persons killed or injured in traffic accidents in each State and the Australian Capital Territory during 1957-58:—

**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): AGES OF PERSONS KILLED OR INJURED, 1957-58.**

Age Group (Years).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
<b>PERSONS KILLED.</b>								
Under 5	28	15	9	12	5	5	..	74
5 and under	14	8	4	4	5	4	..	39
7 " " 17	60	34	20	17	13	6	..	150
17 " " 21	95	46	52	19	22	10	..	244
21 " " 30	147	100	58	30	28	16	3	382
30 " " 40	105	74	54	26	30	9	1	299
40 " " 50	86	66	24	34	13	4	..	228
50 " " 60	93	66	43	19	12	8	..	241
60 and over	165	129	78	30	36	8	..	446
Not Stated	1	33	..	9	..	..	..	43
<b>Total</b>	<b>794</b>	<b>571</b>	<b>342</b>	<b>200</b>	<b>164</b>	<b>70</b>	<b>5</b>	<b>2,146</b>

<b>PERSONS INJURED.</b>								
Under 5	588	399	275	182	158	25	14	1,641
5 and under	426	317	154	135	85	24	7	1,148
7 " " 17	2,325	1,517	1,049	715	548	126	46	6,326
17 " " 21	3,090	1,882	1,644	857	742	189	54	8,458
21 " " 30	4,166	2,962	1,927	1,063	743	191	72	11,124
30 " " 40	3,004	2,078	1,360	743	493	134	59	7,871
40 " " 50	2,303	1,531	867	517	389	69	34	5,710
50 " " 60	1,556	1,041	658	361	280	60	19	3,975
60 and over	1,586	1,023	645	328	266	68	14	3,930
Not Stated	334	285	160	591	545	114	1	2,030
<b>Total</b>	<b>19,378</b>	<b>13,035</b>	<b>8,739</b>	<b>5,492</b>	<b>4,249</b>	<b>1,000</b>	<b>320</b>	<b>52,213</b>

(a) Accidents (reported to the police) which occurred in public thoroughfares and which caused death or injury to persons to an extent requiring surgical or medical treatment.

(iv) *Accidents Recorded and Casualties, classified according to Type of Vehicle, Road User, etc., Involved.* The following table shows, for the year 1957-58, the number of accidents involving casualties in which each of several classes of vehicles, road users, etc. were involved. The persons killed and injured are similarly classified.

**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a), CLASSIFIED ACCORDING TO TYPE OF VEHICLE, ROAD USER, ETC., INVOLVED, AUSTRALIA, 1957-58.(b)**

Particulars.	Motor Vehicle.	Motor Cycle.	Pedal Cycle.	Tram.	Animal and Animal-drawn Vehicle.	Pedestrian.	Fixed Object.	Other Vehicle.
Accidents Involving								
Casualties ..	36,104	6,700	4,537	442	447	7,718	2,643	202
Persons Killed ..	1,975	258	138	23	12	622	153	52
Persons Injured ..	48,358	7,714	4,720	521	526	7,628	3,702	329

(a) Accidents (reported to the police) which occurred in public thoroughfares and which caused death or injury to persons to an extent requiring surgical or medical treatment. (b) It should be noted that, as accidents and casualties classified according to one type of road user, etc., may also be classified according to another, these totals cannot be added across to obtain grand totals. The figures above exclude 32 accidents involving casualties which were not classified according to type of vehicle, road user, etc., involved, from which there were 4 persons killed and 34 persons injured.

It will be seen, therefore, that in 1957-58, motor vehicles were involved in 36,104 accidents involving casualties from which there were 1,975 persons killed and 48,358 persons injured. The 36,104 accidents involving casualties in which motor vehicles were involved comprised 10,985 collisions with other motor vehicles, 4,313 with motor cycles, 3,648 with pedal cycles, 192 with trams, 227 with animals and animal-drawn vehicles, 6,881 with pedestrians, 2,291 with fixed objects, 150 with vehicles other than those mentioned, 6,974 instances of overturning or leaving the roadway, and 443 accidents to passengers only. The particulars of accidents involving casualties in which motor cycles, pedal cycles, etc., were involved with motor vehicles are also included under their respective headings in the table above. Consequently, since the figures in each column refer to the *total* accidents involving casualties in which the particular type of vehicle, etc., was involved, any aggregation across would result, through duplication, in considerable overstatement of the actual totals.

3. Road Traffic Accidents Involving Casualties, and Persons Killed or Injured.—The following table shows the number of road traffic accidents involving casualties and persons killed or injured in road traffic accidents in each State and the Australian Capital Territory during each of the years 1953-54 to 1957-58:—

**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES (a) AND PERSONS KILLED OR INJURED.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.	
								Number.	Per 10,000 Motor Vehicles Registered.
<b>ACCIDENTS INVOLVING CASUALTIES.</b>									
1953-54 ..	11,691	10,537	6,349	2,742	3,079	982	143	35,523	183
1954-55 ..	12,557	10,217	6,586	3,098	3,149	864	131	36,602	172
1955-56 ..	12,917	10,606	7,116	2,886	3,211	874	156	37,766	166
1956-57 ..	13,473	10,804	7,527	3,142	3,082	852	186	39,066	167
1957-58 ..	14,646	9,536	6,565	4,372	3,338	779	237	39,473	161
<b>PERSONS KILLED.</b>									
1953-54 ..	728	569	278	153	175	67	6	1,976	11
1954-55 ..	798	528	273	173	206	57	7	2,042	10
1955-56 ..	808	582	298	167	185	72	7	2,119	10
1956-57 ..	774	589	325	185	168	65	7	2,113	9
1957-58 ..	794	571	342	200	164	70	5	2,146	9
<b>PERSONS INJURED.</b>									
1953-54 ..	14,660	13,351	7,933	3,420	3,935	1,156	174	44,629	238
1954-55 ..	15,959	12,833	8,421	3,926	4,036	1,111	179	46,465	226
1955-56 ..	17,047	13,483	9,170	3,709	4,098	1,046	220	48,773	221
1956-57 ..	17,321	14,120	9,800	3,944	3,921	1,107	237	50,450	216
1957-58 ..	19,378	13,035	8,739	5,492	4,249	1,000	320	52,213	213

(a) Accidents (reported to the police) which occurred in public thoroughfares and which caused death or injury to persons to an extent requiring surgical or medical treatment.

**H. AVIATION.**

1. **Historical.**—A short review of the progress of civil aviation in Australia up to the date of foundation of a Civil Aviation Administration was published in Official Year Book No. 16, pages 334-5.

2. **Foundation and Administration of Civil Aviation.**—A brief account of the foundation and objects of this Administration will be found in Official Year Book No. 19, page 299. Official Year Book No. 38 and earlier issues contain information on the control of civil aviation by the Board (1936) and later (1939) by the Department of that name. The Acts defining the broad principles of operation of the administration of civil aviation and the Regulations amplifying them, and the principal functions of the administration are also described.

Details of the partial re-organization of the Department in June, 1954, to provide for the more effective distribution of duties and responsibilities among senior officers, were published in Official Year Book No. 43, page 409. At that date there were nine Divisions—Air Transport and External Relations; Administration, Personnel and Establishments; Finance and Stores; Airports; Flying Operations; Airways Operations; Airways Engineering; Aviation Medicine; Accident Investigation and Analysis.

In 1956, the Division of Airports was divided into two separate Divisions, namely, Airport Engineering and Aviation Buildings and Property. This latter Division, in addition to its buildings function, became responsible for the implementation of the new organization to provide an efficient aviation fire service.

In 1957, the position of Assistant Director-General (Air Transport Policy) was abolished and a position of Assistant Director-General (Policy) was created in lieu. A Director of International Relations was also appointed.

3. **International Activity.**—(i) *International Organizations.* A full report of the formation of the International Civil Aviation Organization, the Commonwealth Air Transport Council and the South Pacific Air Transport Council appeared in Official Year Book No. 37 and particulars of subsequent activity in the international field were included in issue No. 38. The International Civil Aviation Organization had a membership of 73 nations at the end of 1958. Australia has continued her representation on the council, a position which she has held since the organization was established in 1947. The twelfth meeting of the South Pacific Air Transport Council was held in Melbourne in November, 1958. Further details will be found in Official Year Book No. 40 and earlier issues.

(ii) *International Air Services.* Major changes in the organization of trans-Pacific and trans-Tasman airline operations were outlined in Official Year Book No. 41. Qantas Empire Airways continues to operate international services to the United Kingdom through the Middle East, to Japan via Hong Kong and Manila, to South Africa across the Indian Ocean, to North America, to the British Solomon Islands, to Netherlands New Guinea and to New Caledonia. The company commenced operations to the United Kingdom via North America in January, 1958. It also operates services to the Territory of Papua and New Guinea and to Norfolk Island. Qantas Empire Airways is equipped for long-range operations with sixteen Super Constellation aircraft, which are now operating on its services to the United Kingdom, South Africa, Japan, North America and the Territory of Papua and New Guinea (as from January, 1959) whilst DC4 aircraft are used on the services to New Caledonia, Norfolk Island and the freighter service to Singapore. Orders have been placed for seven Boeing 707 jet aircraft and four Lockheed Electra aircraft which the Company proposes to introduce on its services in the latter half of 1959. Qantas was operating aircraft over 59,396 route-miles on international services at 30th June, 1958. A summary of the operations of oversea services wholly or partly Australian-owned appears on page 549.

DC6 aircraft operated by Tasman Empire Airways Ltd., which is jointly owned by the Australian and New Zealand Governments, link Sydney and Melbourne with both Auckland and Christchurch. The Company has on order three Lockheed Electra aircraft which it proposes to introduce on its services early in 1960.

4. **Regular Air Services within Australia.**—Details of the Government's rationalization scheme and the 1957 amendment to the Civil Aviation Agreement Act consequent upon Ansett Transport Industries Ltd. purchasing Australian National Airways Pty. Ltd. will be found in Official Year Book No. 44, page 421.

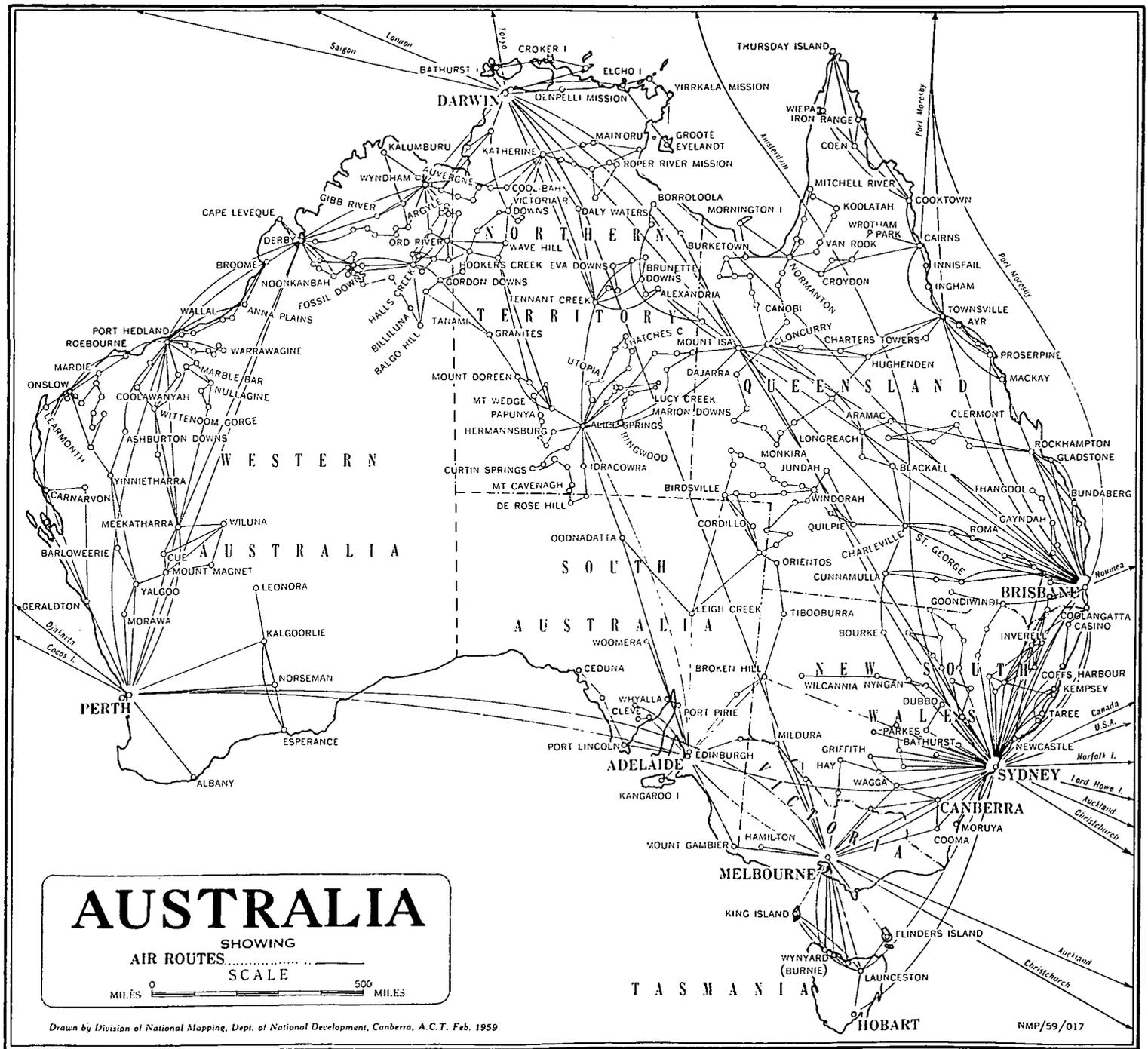
The Airlines Equipment Act assented to in October, 1958, gave effect to financial arrangements whereby the borrowing powers of the Australian National Airlines Commission were increased primarily to enable the purchase of two Lockheed Electra aircraft and whereby the Commonwealth would guarantee the repayment of, and the payment of interest on, certain loans for Ansett Transport Industries Ltd. or Australian National Airways Pty. Ltd. for the purchase of two Lockheed Electra and six Fokker Friendship aircraft.

The Act also contains further rationalization provisions whereby the Minister for Civil Aviation can determine the maximum capacity to be operated by the Australian National Airlines Commission and Ansett Transport Industries Ltd. on both competitive and non-competitive routes. In this regard the Act provides for consultation between the two Airlines and the Director-General of Civil Aviation for the purpose of considering matters relevant to the making of estimates and determinations of capacity.

A summary of the operations of regular air services within Australia appears on page 548 and a map showing air routes on pages 543-4.

5. **Air Ambulance Services.**—A brief statement of the foundation and objects of the Air Ambulance Services will be found in Official Year Book No. 32, pages 145 and 146.

During the year 1957-58, the Air Ambulance and Royal Flying Doctor Services continued to provide medical aid for the outback regions of Australia. The Commonwealth Department of Health operates the Northern Territory Aerial Medical Service with two Drover and two Dove aircraft. The Royal Flying Doctor Service of Australia, operating from Broken Hill, New South Wales (two Drovers), and Port Hedland, Western Australia (three Cessna and one DH83), covers a wide area of inland Australia. The Bush Church Aid Society for Australia and Tasmania, supported by funds from the Church of England, maintains two aircraft (one Percival Proctor III and one Lockheed 12A) at Ceduna, South Australia. The Federal Methodist Inland Mission (one DH82A) operates services from Meekatharra, Western Australia and the Queensland Ambulance Transport Brigade operates a service from Cairns (one DH89A, one Auster J5B and one Cessna 182A).





**6. Training of Air Pilots.**—A brief statement of the pre-war policy of the Commonwealth Government regarding assistance to Aero Clubs was given in Official Year Book No. 32, page 146. A summary of the assistance granted during the years 1951 to 1956 will be found in Official Year Book No. 42, page 253, whilst details of the new contract, initiated on 1st January, 1957, and the assistance granted during 1956-57 will be found in Official Year Book No. 44, page 421.

During the year 1957-58, the flying training organizations (non-profit aero clubs and commercial flying schools) earned bonuses in respect of 383 private pilot licences, 172 commercial pilot licences and 35 initial instructor ratings. It should be noted that, under the new contract, commercial licence issue and instructor rating bonuses were substituted for renewal bonuses. Subsidized hours flown by aero clubs and flying schools numbered 74,991 and the total earnings of all organizations amounted to £188,483. An overall limit placed on the subsidy restricted the total payments to £145,000. There were 24 aero clubs and 6 commercial flying training schools in operation during the year, and, in addition to civil flying, some 8,153 unsubsidized civil hours and 4,756 service training hours were flown; in all, a total of 87,900 hours.

**7. Gliding Clubs.**—For the year 1957-58, a total subsidy of £3,000 was distributed to member clubs of the Gliding Federation of Australia, on the basis of £1,500 for membership and £1,500 for gliding certificates issued. In addition, the Federation received a grant of £1,000 towards the cost of operation of its school for instructors and engineers.

**8. Airways Engineering.**—During 1957-58 substantial progress was made in the extension of the airways engineering system.

Increased communication facilities extended the area of direct speech over very high frequency channels between air and ground, particularly in New South Wales where mountain top installations at Katoomba and Point Lookout came into service. The provision of direct very high frequency speech in the area bounded by Adelaide, Hobart and Brisbane is now available for 95 per cent. of the area. The installation of equipment at the new Sydney International Transmitting Station reached an advanced stage and test communications with Fiji and Manila were most satisfactory.

The navigational aids system has been extended by the provision of Instrument Landing Systems at Hobart, Sydney (the second at the airport) and Canberra, and the provision of further compass locators, non directional beacons and distance measuring equipment. Seventy distance measuring equipment beacons are now in service.

In the field of air traffic control engineering substantial progress has been made in the design and construction of facilities for control towers, area control centres and aeradios. The control tower at Hobart was commissioned and the control tower at Adelaide brought into service. Substantial quantities of basic units, amplifiers, splitters and other ancillary equipment for air traffic control engineering were designed and purchased. A modernization programme for aeradios was launched and appropriate equipment designed.

The airways now incorporate a well established navigational aids system based upon visual/aural ranges, distance measuring equipment beacons, non directional beacons and instrument landing systems, an operational communications system providing direct speech between air and ground in the more important areas, and high speed point to point circuits for the passing of operational traffic messages. The system is well supported by monitoring services, emergency power, control circuits and automatic changeover facilities.

**9. Air Traffic Control.**—Air traffic control planning has been concentrated on the integration of ever increasing numbers of turbine engined aircraft into the traffic pattern. Greater use is now being made of the higher operating levels and consequently it has been necessary to extend the controlled airspace upwards to 29,000 feet.

New and improved air traffic control techniques have been developed for the longitudinal and lateral spacing of aircraft in the controlled airspace. This has been made possible by improved very high frequency communications between the ground organization and aircraft and by the greater use of distance measuring equipment which allows the pilot to provide more accurate positional data, and air traffic control to apply reduced separation standards. Thus, delays to aircraft in the busy terminal areas such as Melbourne, Sydney and Brisbane have been substantially reduced and this in turn has shown marked improvement in airline schedule keeping.

Factors associated with modern aircraft, such as high speed and restricted cockpit visibility, have resulted in the exercise of more rigid control in good weather conditions. The standards applicable to instrument meteorological conditions now apply to all flights except those in close proximity to the aerodrome when weather conditions allow pilots to provide their own separation with the assistance of the aerodrome control service.

Another important advance which permitted the reduction of minimum intervals between instrument landings and increased safety during the final approach phase, was the development of pilot procedures based on the Sydney and Melbourne localizers, instrument landing systems, and high intensity approach lighting. These facilities enable pilots to fly aircraft directly to the runway in use, thus removing the necessity for expensive and time-consuming circuits to line up with the duty runway.

Melbourne, Sydney, Adelaide, Townsville and Launceston control centres are now housed in new or renovated airport buildings, while flight data presentation equipment in the form of modern flight-progress boards has been installed at Melbourne and Sydney. This equipment incorporates the facilities which permit rapid communication with aircraft and direct communication by landline or radio telephone with adjacent control centres for the proper co-ordination of control throughout the controlled airspace.

New control towers together with modern flight data and communication consoles have been completed or are nearing completion at Sydney, Melbourne, Adelaide, Darwin, Hobart, Launceston and Brisbane airports.

New radar equipment has been installed in the Melbourne control tower and is undergoing trial prior to being commissioned for operational use.

In the first instance, the tower will use the equipment for radar monitoring of aircraft movements in the terminal area as an added safety measure, and, when experience has been gained it will be used for more positive control purposes.

Similar equipment is planned for installation in the Sydney control tower during 1959. During 1958, a series of discussions culminated in the development of civil and military agreement in relation to the designation of airspaces, rules of the air and provision of air traffic services.

It is anticipated that the joint document now in draft form will be published and become effective towards the latter part of 1959.

**10. Meteorological Services.**—The Department of Civil Aviation is the biggest user of meteorological services in the Australian Commonwealth and its territories, and therefore the requirements for civil aviation purposes have played a big part in determining the form of meteorological organization that exists at the present time.

The need for the dissemination of adequate and accurate meteorological information to flights has become more important in recent years with the greater demands of high performance aircraft, with their more critical fuel requirements and greater susceptibility to changes in atmospheric conditions.

The Department and the Commonwealth Bureau of Meteorology have now completed working arrangements designed to meet the very precise requirements of modern civil aviation in Australia.

The working arrangements specify the standards of service, times and places of operation and facilities required for the provision of meteorological services for civil aviation.

**11. Search and Rescue.**—On 1st November, 1958, the Department assumed full responsibility for co-ordination of search and rescue activity throughout the Australian flight information regions except Darwin, where by arrangement with the Royal Australian Air Force, search and rescue is co-ordinated by the Officer Commanding. The Department also arranges for the availability of search and rescue facilities.

Previously, the Royal Australian Air Force, in operational and financial agreement with the Department of Civil Aviation provided the bulk of the sea-air rescue facilities and the organization to co-ordinate those facilities.

The current search and rescue plan provides for the availability of search aircraft on a self-help basis from within the aviation industry, supplemented by special arrangements with the Department of Shipping and Transport, the Department of the Navy, launch owners, police and military forces, forestry units and so on.

In using general duty aircraft for sea-air rescue purposes, it is necessary to temporarily equip them with droppable dinghies and/or droppable storpedoes fitted with first aid gear, food and water. This, in turn, has necessitated the establishment of limited supplies of these facilities at strategic points throughout Australia and the Territory of Papua and New Guinea.

Along the coastlines of the Commonwealth, marine craft are available and serve as auxiliary sea-air rescue units. However, at selected major aerodromes near the coastline and at Cocos Islands, the Department provides marine craft on a lifeboat principle.

Due to the very high cost of long range ocean going rescue ships, oceanic rescue requirements must be satisfied by the use of naval and mercantile shipping diverted to the scene of distress. International law requires the master of a merchant ship at sea to proceed with the utmost dispatch to a distress scene and arrangements have been made for the plotting of all shipping movements upon the declaration of an emergency phase.

Land rescue units are organized in close co-operation with Air Force, Army, Forestry and Police organizations.

12. **Aircraft Parts and Materials.**—At 30th June, 1958, the number of firms and organizations approved by the Department of Civil Aviation to trade in the aircraft industry was 457. With the introduction of gas turbine engines and pressurized aircraft, certain firms have been approved to undertake the specialized work of overhaul, repair and maintenance of these engines and of accessories. The major fuel and oil companies have been brought under a system of quality control.

13. **Aircraft Overhaul and Repair.**—Aircraft overhaul and repair is carried out in workshops approved by the Director-General of Civil Aviation. Components and accessories are now certified on release notes signed by approved members of the firm's inspection organization.

14. **Test and Examination of Aircraft Parts and Materials.**—This work is now carried out in test houses and laboratories registered by the National Association of Testing Authorities, except when production is for the manufacturer's own use, when the testing, etc. can be done in an approved laboratory. Certificates issued under registration by the Association are acceptable to any Commonwealth Government Department.

15. **Statistical Summaries.**—(i) *Registrations, Licences, etc.* The following table provides a summary of the civil aviation registrations and licences in force in Australia at 30th June in each of the years 1954 to 1958.

**CIVIL AVIATION: REGISTRATIONS, LICENCES, ETC., AUSTRALIA.(a)**

Particulars.	At 30th June—				
	1954.	1955.	1956.	1957.	1958.
Registered aircraft owners ..	384	414	437	485	570
Registered aircraft ..	845	887	934	1,054	1,180
<b>Pilots' Licences—</b>					
Private ..	2,035	2,245	2,453	2,592	2,628
Commercial ..	552	582	578	709	845
Senior Commercial ..	..	..	76	99	100
Helicopter (Commercial) ..	..	..	11	21	18
Student ..	2,831	3,193	3,272	3,397	3,493
1st Class Airline Transport	515	548	600	606	656
2nd „ „ „	34	25	9	7	} (b) 389
3rd „ „ „	368	390	394	414	
<b>Navigators' Licences—</b>					
Flight Navigator ..	166	161	177	187	176
<b>Radio Operators' Licences—</b>					
1st Class Flight Radio Tele- graphy Operator ..	88	78	75	69	63
<b>Flight Radio Telephony Operator—</b>					
1st Class ..	834	820	} (c) 1,386	(c) 1,574	(c) 1,823
2nd „ ..	275	309			
3rd „ ..	113	137			
Flight Engineers' Licences ..	67	98	94	116	176
<b>Aircraft Maintenance Engineers' Licences</b> ..	1,757	1,747	1 818	1,915	2,016
<b>Aerodromes—</b>					
Government ..	198	185	188	169	168
Licensed(d) ..	262	303	301	313	311
Flying Boat Bases(e) ..	16	13	13	13	13

(a) Except for aerodromes and flying-boat bases, includes the Territory of Papua and New Guinea.  
 (b) 3rd class abolished and existing licences became 2nd class. (c) Since 1956 only one category (Flight Radiotelephone Operator). (d) Aerodromes under the control and management of a municipality, shire, station owner, private individual, etc. Includes emergency aerodromes. (e) Includes alighting areas.

(ii) *Aircraft on the Australian Register.* A summary of aircraft on the Australian register at 31st December, 1958, classified according to the principal types of operation in which they are engaged, is shown in the following table.

## AIRCRAFT ON THE AUSTRALIAN REGISTER(a), 31st DECEMBER, 1958.

Type of Aircraft.	Number.	Type of Aircraft.	Number.
<b>(i) Aircraft Engaged in Regular Public Transport—</b>		<b>(iii) Aircraft used for Private Purposes—</b>	
Avro Anson .. .. .	4	Auster (All Types) .. .. .	117
Convair 240, 340, 440 .. .. .	10	Avro Anson .. .. .	12
De Havilland (All Types) .. .. .	19	Beechcraft .. .. .	8
Douglas—		Cessna .. .. .	43
DC3 .. .. .	59	De Havilland—	
DC4 (Skymaster) .. .. .	10	DH82 Tiger Moth .. .. .	70
DC6, DC6B .. .. .	6	Moth, other .. .. .	27
Lockheed 1049 (Super Constellation) .. .. .	16	Other .. .. .	25
Vickers Viscount .. .. .	16	Fairchild .. .. .	8
Other Types .. .. .	12	Miles (All Types) .. .. .	16
		Percival (All Types) .. .. .	27
		Piper .. .. .	21
		Ryan .. .. .	10
		Stinson .. .. .	8
		Wackett .. .. .	12
		Other Types .. .. .	33
<b>Total .. .. .</b>	<b>152</b>	<b>Total .. .. .</b>	<b>437</b>
<b>(ii) Aircraft Available for Air Charter—</b>		<b>(iv) Aircraft used for other Purposes(b)—</b>	
Auster (All Types) .. .. .	63	Auster (All Types) .. .. .	23
Avro Anson .. .. .	20	Avro Anson .. .. .	10
Cessna .. .. .	38	De Havilland—	
De Havilland—		DH82 .. .. .	230
DH82 .. .. .	19	Chipmunk .. .. .	57
DH84 .. .. .	12	Other .. .. .	14
Other .. .. .	15	Piper .. .. .	12
Percival (All Types) .. .. .	12	Other Types .. .. .	40
Other Types .. .. .	56	<b>Total .. .. .</b>	<b>386</b>
		<b>Grand Total .. .. .</b>	<b>1,210</b>
<b>Total .. .. .</b>	<b>235</b>		

(a) Includes those based in the Territory of Papua and New Guinea.  
aerial top-dressing, etc.

(b) Flying School training,

(iii) *Operations of Regular Internal Services.* The next table summarizes the flying activities of regular internal services operating within Australia during each of the years 1953-54 to 1957-58.

## CIVIL AVIATION : OPERATIONS OF REGULAR INTERNAL SERVICES, AUSTRALIA.

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Hours flown .. .. .	251,019	257,787	251,900	251,139	237,981
Miles .. .. .	41,014	43,513	43,701	42,120	40,533
Paying passengers .. .. .	1,772,357	1,918,125	2,020,380	2,125,338	2,122,794
Paying passenger-miles .. .. .	702,139	765,652	827,885	891,196	898,542
Freight—					
Tons(a) .. .. .	69,479	78,711	84,446	75,092	70,003
Ton-miles(a) .. .. .	32,650	36,984	38,909	36,330	32,987
Mail—					
Tons(a) .. .. .	2,316	2,317	2,478	2,514	2,642
Ton-miles(a) .. .. .	1,225	1,257	1,357	1,404	1,446

(a) In terms of short tons (2,000 lb.).

(iv) *Operations of Oversea Services wholly or partly Australian-owned.* The following table furnishes a summary of overseas services, wholly or partly owned by Australian interests, operating between Australia and overseas countries, including Pacific islands and the Territory of Papua and New Guinea, during the years 1953-54 to 1957-1958. The operations of Qantas Empire Airways, Tasman Empire Airways Ltd. and British Overseas Airways Corporation are included, but those of Canadian Pacific Airlines, K.L.M., T.A.I. (French Airline), South African Airways, Air India International and Pan-American Airways are excluded.

**CIVIL AVIATION : OPERATIONS OF OVERSEA SERVICES.(a)**

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Route miles (unduplicated) at 30th June ..	64,250	63,774	58,618	62,675	71,729
Hours flown .. .. .	53,580	49,326	50,665	56,939	63,917
Miles .. .. . '000	11,464	11,128	12,028	13,614	15,267
Paying passengers .. .. .	102,965	114,371	131,934	155,618	164,634
Paying passenger-miles .. .. . '000	290,603	317,565	383,930	476,831	501,388
Freight—					
Tons(b) .. .. .	2,295	2,662	2,990	2,957	3,205
Ton-miles(b).. .. . '000	8,331	9,372	10,494	11,203	12,051
Mail—					
Tons(b) .. .. .	1,379	1,442	1,491	1,622	1,749
Ton-miles(b).. .. . '000	7,718	7,927	8,458	9,450	9,789

(a) Airlines wholly or partly owned by Australian interests. (b) In terms of short tons (2,000 lb.).

(v) *Accidents and Casualties.* The number of accidents involving aircraft on the Australian register in which persons were killed or injured is shown in the following table for the years 1953-54 to 1957-58.

**CIVIL AVIATION : ACCIDENTS INVOLVING AUSTRALIAN AIRCRAFT.(a)**

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Number(b) .. .. .	26	22	31	37	35
Persons killed .. .. .	36	27	22	24	28
Persons injured .. .. .	27	19	27	36	31

(a) Includes accidents and casualties in the Territory of Papua and New Guinea. (b) Includes all accidents irrespective of whether they involved death or injury.

16. *Territory of Papua and New Guinea.*—In this area there were, at 30th September, 1958, 20 aerodromes and 24 water aerodromes under the control of the Department of Civil Aviation; 61 aerodromes under the control of the Territory Administration; and 24 aerodromes and 2 water aerodromes under private control. Ten cleared heliports and approximately 300 helicopter clearings were also in existence.

Five companies conduct regular services between the major aerodromes. Charter flights can be arranged to almost any locality. Further information may be found in Chapter V.—The Territories of Australia.

During the year 1957-58, no accidents involving aircraft occurred in the Territory of Papua and New Guinea.

## PART II.—COMMUNICATION.

## A. POSTS ; TELEGRAPHS ; TELEPHONES ; CABLE AND RADIO COMMUNICATION.

NOTE.—In this Division particulars for the Australian Capital Territory are included with those for New South Wales, while the South Australian figures include particulars for the Northern Territory unless otherwise indicated.

## § 1. General.

1. The Postmaster-General's Department.—Under the provisions of the Post and Telegraph Act 1901, the Department was placed under the control of the Postmaster-General. The Director-General of Posts and Telegraphs controls the Department under the Postmaster-General, whilst the principal officer in each State is the Director of Posts and Telegraphs.

2. Postal Facilities.—(i) *Relation to Area and Population.* The following statement shows the number of post offices, the area in square miles and the number of inhabitants to each post office (including non-official offices) and the number of inhabitants to each 100 square miles in each State and in Australia at 30th June, 1958. In order to judge clearly the relative postal facilities provided in each State, the area of country to each office as well as the number of inhabitants per office should be taken into account.

## POSTAL FACILITIES : RELATION TO AREA AND POPULATION AT 30th JUNE, 1958.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Number of post offices(a) .. .. .	2,563	2,298	1,264	902	636	516	8,179
Number of square miles of territory per office .. .. .	121	38	530	1,002	1,534	51	364
Number of inhabitants per office .. .. .	1,455	1,193	1,121	1,016	1,109	650	1,204
Number of inhabitants per 100 square miles .. .. .	1,202	3,119	211	101	72	1,279	331

(a) Includes "official", "semi-official", and "non-official" offices.

The foregoing table does not include "telephone" offices at which no postal business is transacted.

(ii) *Number of Offices.* The following table shows the number of post offices (exclusive of telephone offices) in each State at 30th June, 1958.

## NUMBER OF POST OFFICES AT 30th JUNE, 1958.

Type of Office.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Aust.
Official and Semi-official(a) .. .. .	513	319	221	166	150	53	1,422
Non-official .. .. .	2,050	1,979	1,043	736	486	463	6,757
<b>Total .. .. .</b>	<b>2,563</b>	<b>2,298</b>	<b>1,264</b>	<b>902</b>	<b>636</b>	<b>516</b>	<b>8,179</b>

(a) There were three semi-official post offices in N.S.W. and three in Victoria.

(iii) *Employees and Mail Contractors.* The number of employees and mail contractors in the Central Office and in each of the States at 30th June, 1958 are given in the following table:—

**NUMBER OF POSTAL EMPLOYEES AND MAIL CONTRACTORS AT  
30th JUNE, 1958.**

Particulars.	Central Office.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Employees .. .. .	1,189	35,887	25,918	13,908	9,020	6,525	3,708	96,155
Mail Contractors(a) ..	..	2,127	1,147	1,204	383	289	249	5,399

(a) Includes persons employed to drive vehicles.

3. *Gross Revenue, Branches—Postmaster-General's Department.*—The gross revenue (actual collections) in respect of each branch of the Department during the year 1957–58 is shown in the table hereunder:—

**POSTMASTER-GENERAL'S DEPARTMENT: GROSS REVENUE, 1957-58.(a)**  
(£'000.)

Sources.	N.S.W.	Vic.(b)	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Postage .. .. .	11,969	c10,098	3,978	2,624	1,902	768	31,339
Money order commission and poundage on postal notes ..	398	247	108	95	58	26	932
Private boxes and bags ..	84	57	45	29	20	12	247
Miscellaneous .. .. .	1,055	900	359	190	157	84	2,745
<b>Total, Postal .. .. .</b>	<b>13,506</b>	<b>11,302</b>	<b>4,490</b>	<b>2,938</b>	<b>2,137</b>	<b>890</b>	<b>35,263</b>
Telegraphs .. .. .	2,059	1,470	1,185	693	581	181	6,169
Telephones .. .. .	21,736	16,240	7,659	4,975	3,124	1,610	55,344
<b>Grand Total .. .. .</b>	<b>37,301</b>	<b>29,012</b>	<b>13,334</b>	<b>8,606</b>	<b>5,842</b>	<b>2,681</b>	<b>96,776</b>

(a) The figures in this table relate to revenue actually collected during the year as recorded for Treasury purposes. (b) Includes Central Office collections. (c) Includes Central Office revenue from airmail services.

For each of the years 1953–54 to 1956–57 the gross revenue for Australia was £67,797,000, £72,825,000, £79,341,000 and £90,074,000 respectively.

Gross revenue for the year 1957–58 increased by 7.4 per cent. compared with that for the previous year. Revenue of the Postal, Telegraph and Telephone branches increased by 6.3 per cent., 4.5 per cent. and 8.5 per cent. respectively.

4. *Expenditure, Postmaster-General's Department.*—(i) *Distribution.* The following table shows, as far as possible, the distribution of expenditure (actual payments) in each State during 1957–58, as shown by records kept for Treasury purposes. The table must not be regarded as a statement of the working expenses of the Department, since items relating to new works, interest, etc., are included therein.

**POSTMASTER-GENERAL'S DEPARTMENT : DISTRIBUTION OF EXPENDITURE, 1957-58.(a)**

(£'000.)

Particulars.	Central Office.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
<b>Expenditure from Ordinary Votes—</b>								
Salaries and payments in the nature of salary .. ..	544	15,876	11,260	6,131	3,893	2,579	1,519	41,802
General expenses .. ..	80	1,866	1,236	516	401	291	142	4,532
Stores and material .. ..	35	952	573	323	187	173	89	2,332
Mail services .. ..	(b)4,537	1,650	844	814	407	251	123	8,626
Engineering services (other than capital works) .. ..	930	13,147	9,002	4,881	2,942	2,267	1,184	34,353
Other services .. ..	(c) 84	..	..	..	..	..	..	84
<b>Total .. ..</b>	<b>6,210</b>	<b>33,491</b>	<b>22,915</b>	<b>12,665</b>	<b>7,830</b>	<b>5,561</b>	<b>3,057</b>	<b>91,729</b>
<b>Rent, repairs, maintenance</b> .. ..	<b>.. 3</b>	<b>538</b>	<b>440</b>	<b>146</b>	<b>117</b>	<b>67</b>	<b>31</b>	<b>1,339</b>
<b>Proportion of audit expenses</b> .. ..	<b>..</b>	<b>17</b>	<b>12</b>	<b>7</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>48</b>
<b>Capital works and services—</b>								
Telegraph and telephone .. ..	100	11,898	8,440	3,326	2,895	2,230	1,109	29,998
New buildings, etc. .. ..	..	1,578	1,225	604	447	250	209	4,313
<b>Other expenditure, not allocated to States</b> .. ..	<b>(d)3,836</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>3,836</b>
<b>Grand Total .. ..</b>	<b>10,149</b>	<b>47,522</b>	<b>33,032</b>	<b>16,748</b>	<b>11,293</b>	<b>8,111</b>	<b>4,408</b>	<b>131,263</b>

(a) The figures in this table represent actual payments made during the year as recorded for Treasury purposes. (b) Expenditure on airmail services. (c) Excludes subsidy on coastal wireless stations, now provided by votes to the Department of Shipping and Transport. (d) Includes expenditure not apportioned to States, i.e., interest on loans, £833,000; sinking fund, £979,000; superannuation contributions, £2,002,000; transferred officers' pensions and allowances, £2,000; pensions and retiring allowances, £5,000, and pension supplements, £15,000.

(ii) *Totals.* Grand total expenditure for Australia for each of the years 1953-54 to 1956-57, respectively, were:—£99,478,000, £103,586,000, £114,397,000 and £121,917,000. Total expenditure increased by 7.7 per cent. during 1957-58, compared with that during 1956-57.

**5. Profit or Loss, Postmaster-General's Department.**—The foregoing statements of gross revenue and expenditure represent actual collections and payments made and cannot be taken to represent the actual results of the working of the Department for the year. The net results for each branch, after providing for working expenses (including superannuation, pensions and depreciation) and interest charges including exchange, are shown in the following table for the years 1953-54 to 1957-58.

**POSTMASTER-GENERAL'S DEPARTMENT : PROFIT OR LOSS, BRANCHES.**

(£'000.)

Branch.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Postal .. ..	— 1,849	— 2,254	— 2,402	— 1,526	— 1,954
Telegraph .. ..	— 1,219	— 800	— 1,202	— 638	— 330
Telephone.. ..	3,221	2,905	3,179	5,281	6,294
<b>All Branches .. ..</b>	<b>153</b>	<b>— 149</b>	<b>— 425</b>	<b>3,117</b>	<b>4,010</b>

NOTE.—Minus sign (—) indicates loss.

6. Fixed Assets.—(i) *Details, 1957-58.* The following table shows particulars of the fixed assets of the Postmaster-General's Department from 1st July, 1957 to 30th June, 1958:—

POSTMASTER-GENERAL'S DEPARTMENT : FIXED ASSETS.  
(£'000.)

Particulars.	Net Value, 1st July, 1957.	Capital Expendi- ture, 1957-58.	Gross Value, 30th June, 1958.	Assets Dis- mantled or Written Off 1957-58.	Net Value, 30th June, 1958.
Telephone and telegraph plant ..	297,057	39,575	336,632	5,267	331,365
Mail-handling plant .. ..	333	156	489	12	477
Buildings .. ..	33,689	4,459	38,148	24	38,124
Motor vehicles .. ..	7,304	1,518	8,822	658	8,164
Assets subject to direct depreciation(a)	4,172	908	5,080	341	4,739
Other fixed assets .. ..	15,351	1,363	16,714	146	16,568
<b>Total .. ..</b>	<b>357,906</b>	<b>47,979</b>	<b>405,885</b>	<b>6,448</b>	<b>399,437</b>

(a) Includes postal service plant, miscellaneous plant, furniture and office equipment.

(ii) *Net Value.* The net value of the fixed assets of the Postmaster-General's Department at 30th June in each of the years 1954 to 1957, respectively, was:—£253,627,000, £285,205,000, £319,691,000 and £357,906,000.

## § 2. Posts.

1. *Postal Matter Dealt With.*—(i) *States, 1957-58.* The following table shows a summary of the postal matter dealt with, in each State, during the year 1957-58. Mail matter posted in Australia for delivery therein is necessarily handled at least twice, but only the number of distinct articles handled is included in the following table.

POSTAL MATTER DEALT WITH(a), 1957-58.  
(°000.)

State.	Letters.	News- papers and Packets.	Parcels.	Regis- tered Articles.	Letters.	News- papers and Packets.	Parcels.	Regis- tered Articles.
	(b)	(c)	(d)	(e)	(b)	(c)	(d)	(e)
	Posted for delivery within Australia.				Posted for delivery Overseas.			
New South Wales ..	545,194	114,848	6,384	4,910	18,783	10,136	406	981
Victoria .. ..	421,769	75,912	4,747	3,835	10,113	4,753	139	211
Queensland .. ..	187,358	28,851	2,509	1,902	7,078	1,162	47	67
South Australia ..	125,074	11,526	1,288	959	4,334	786	48	68
Western Australia ..	97,500	8,839	1,129	707	5,427	1,411	31	56
Tasmania .. ..	42,387	7,454	225	487	349	20	18	32
<b>Australia ..</b>	<b>1,419,282</b>	<b>247,430</b>	<b>16,282</b>	<b>12,800</b>	<b>46,084</b>	<b>18,268</b>	<b>689</b>	<b>1,415</b>
	Received from Overseas.				Total postal matter dealt with.			
New South Wales ..	45,482	30,185	343	993	609,459	155,169	7,133	6,884
Victoria .. ..	13,603	9,653	239	206	445,485	90,318	5,125	4,252
Queensland .. ..	4,067	4,771	62	30	198,503	34,784	2,618	1,999
South Australia ..	4,987	5,377	51	29	134,395	17,689	1,387	1,056
Western Australia ..	3,434	5,910	45	56	106,361	16,160	1,205	819
Tasmania .. ..	1,570	2,090	15	37	44,306	9,564	258	556
<b>Australia ..</b>	<b>73,143</b>	<b>57,986</b>	<b>755</b>	<b>1,351</b>	<b>1,538,509</b>	<b>323,684</b>	<b>17,726</b>	<b>15,566</b>

(a) See explanation above.

(b) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters.

(c) Includes newspapers and postal articles not included in letter mail.

(d) Includes registered, cash on delivery and duty parcels.

(e) Includes registered articles other than parcels.

(b) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters.

(c) Includes newspapers and postal articles not included in letter mail.

(d) Includes registered, cash on delivery and duty parcels.

(e) Includes registered articles other than parcels.

(ii) *Australia.* The next table shows the total postal matter dealt with in Australia during each of the years 1953-54 to 1957-58.

**TOTAL POSTAL MATTER DEALT WITH : AUSTRALIA.**

Year.	Letters, Postcards and Letter-cards.		Newspapers and Packets.		Parcels.(a)		Registered Articles other than Parcels.	
	Total ('000.)	Per 1,000 of Mean Population.	Total ('000.)	Per 1,000 of Mean Population.	Total ('000.)	Per 1,000 of Mean Population.	Total ('000.)	Per 1,000 of Mean Population.
1953-54 ..	1,309,099	147,084	261,180	29,345	16,639	1,869	16,703	1,877
1954-55 ..	1,344,642	147,922	274,158	30,160	16,765	1,844	17,628	1,939
1955-56 ..	1,414,222	151,811	291,048	31,243	17,334	1,861	18,376	1,973
1956-57 ..	1,443,337	151,372	306,417	32,136	16,998	1,783	17,007	1,784
1957-58 ..	1,538,509	157,865	323,684	33,213	17,726	1,819	15,566	1,597

(a) Includes registered, cash on delivery and duty parcels.

2. **Cash on Delivery Parcels Post.**—(i) *General.* The Postmaster-General's Department undertakes, upon prepayment of a prescribed commission, to deliver registered articles sent by parcels post within Australia, or between Australia and Lord Howe Island, Norfolk Island, Nauru, the Territory of Papua and New Guinea, or Fiji, to recover from the addressee on delivery a sum of money specified by the sender, and to remit the sum to the sender. The object of the system is to meet the requirements of persons who wish to pay at the time of receipt for articles sent to them, and of traders and others who do not wish their goods to be delivered except on payment.

(ii) *States.* The next table shows particulars regarding the cash on delivery parcels posted in each State in 1957-58.

**CASH ON DELIVERY PARCELS POST, 1957-58.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Parcels posted '000	313	94	122	46	46	3	624
Value .. £'000	1,165	285	421	180	160	11	2,222
Revenue(a) £'000	97	36	36	16	14	1	200

(a) From commission and postage.

(iii) *Australia.* In the following table particulars of cash on delivery parcels posted in Australia are shown for the years 1953-54 to 1957-58.

**CASH ON DELIVERY PARCELS POST : AUSTRALIA.**

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Parcels posted .. '000	888	845	762	672	624
Value .. .. £'000	2,876	2,804	2,526	2,289	2,222
Revenue(a) .. .. £'000	239	225	206	215	200

(a) From commission and postage.

3. **Total Cost of Carriage of Mails.**—During 1957-58, the total amounts paid for the carriage of mails, as disclosed by the Profit and Loss Account of the Postal Branch, were as follows:—road (including departmental transport) £3,543,000; railway £1,258,000; sea £183,000; air—internal £696,000, oversea £3,520,000; Grand Total—£9,200,000.

4. **Transactions of the Dead Letter Offices.**—During the year 1957-58, 1,479,000 letters were returned to senders or delivered, 346,000 were destroyed in accordance with the Act, and 221,000 were returned to other countries as unclaimed—a total of 2,046,000. Corresponding particulars for packets were—508,000, 226,000, 36,000 and 770,000. There were 2,816,000 articles handled in all.

5. **Money Orders and Postal Notes.**—(i) *General.* The issue of money orders and postal notes is regulated by sections 74-79 of the Post and Telegraph Act 1901-1950. The maximum amount for which a single money order payable within Australia may be obtained

is £40, but additional orders will be issued upon request when larger amounts are to be remitted. The maximum amount permitted to be sent to any person in the dollar area is £A.5 a month and for remittances to countries outside the dollar area, £A.10 a week. A postal note cannot be issued for a sum larger than twenty shillings.

(ii) *States.* Particulars regarding the business transactions in each State for the year 1957-58 are shown hereunder:—

**MONEY ORDERS AND POSTAL NOTES: TRANSACTIONS, 1957-58.**

(£'000.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Aust.
<b>Money Orders—</b>							
Issued .. ..	38,527	19,136	9,059	5,690	3,830	2,169	78,411
Paid .. ..	38,836	19,335	8,606	5,372	4,838	1,931	78,918
Net Commission							
Received .. ..	263	153	75	39	33	18	581
<b>Postal Notes—</b>							
Issued .. ..	3,802	2,386	898	1,262	609	198	9,155
Poundage Received..	136	93	33	48	22	8	340

(iii) *Australia.* The next table shows the number and value of money orders and postal notes issued and paid in Australia in each of the years 1953-54 to 1957-58.

**MONEY ORDERS AND POSTAL NOTES: TRANSACTIONS, AUSTRALIA.**

Year.	Money Orders.				Postal Notes.			
	Issued.		Paid.		Issued.		Paid.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
	'000.	£'000.	'000.	£'000.	'000.	£'000.	'000.	£'000.
1953-54 ..	6,080	56,175	5,960	56,082	26,168	11,465	26,082	11,441
1954-55 ..	6,755	61,699	6,617	61,262	21,816	10,226	21,867	10,249
1955-56 ..	7,638	70,220	7,337	69,585	23,128	10,450	23,067	10,463
1956-57 ..	8,126	74,542	7,841	73,798	20,332	9,493	20,778	9,709
1957-58 ..	8,668	78,411	8,305	78,918	18,937	9,155	18,415	8,953

(iv) *Classification of Money Orders Issued and Paid.* Of the total money orders issued in Australia during 1957-58, 8,284,000 valued at £77,150,000 were payable in Australia and 384,000 valued at £1,261,000 were payable overseas. Of the total money orders paid in Australia during 1957-58, 8,160,000 (£78,120,000) were issued in Australia and 145,000 (£798,000) were issued overseas.

(v) *Postal Notes Paid.* The following table shows the number and value of postal notes paid in each State during the year 1957-58. The number and value of postal notes issued and paid in each of the years 1953-54 to 1957-58 have been given in the previous table.

**POSTAL NOTES PAID: STATE OF ISSUE, 1957-58.**

Issued in—	Paid in—							
	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Aust.	
Same State	'000	5,895	4,155	1,278	809	886	258	13,281
	£'000	3,144	1,931	658	459	400	116	6,708
Other States	'000	1,423	2,186	759	91	178	497	5,134
	£'000	(a) 642	834	442	47	56	224	2,245
Total	'000	7,318	6,341	2,037	900	1,064	755	18,415
	£'000	3,786	2,765	1,100	506	456	340	8,953

(a) Includes postal notes to the value of £10,139 issued in other countries.

### § 3. Telegraphs.

1. **General.**—A review of the development of telegraph services in Australia up to 1921 appeared in Official Year Book No. 15, page 625, and subsequent developments of importance have been dealt with in later issues. During the past few years substantial improvements in both the speed and grade of telegraph services throughout Australia have been effected, the entire system being subjected to intensive re-organization. The external circulation system of the Australian telegraph service has been considerably modified, and direct communication has been established between cities and towns which formerly were served through intermediate repeating centres.

Telephone subscribers may telephone telegrams for onward transmission, or have messages telephoned to them. The fee for the service is small, and means, in effect, that the telegraph system is brought into the home of every telephone subscriber. The number of telegrams lodged by telephone during the year 1957–58 was about 8.5 million, or approximately 37 per cent. of the total lodgments. The number of telegrams telephoned to subscribers totalled 4.6 million.

A radiogram service is provided to certain isolated places throughout Australia and a number of privately-operated wireless transceiver stations have been established at various centres throughout the Commonwealth, enabling telegrams to be exchanged with departmental telegraph offices. Stations sponsored by the Royal Flying Doctor Service of Australia can communicate by wireless with base stations.

A picturegram service is provided at the capital cities of the States and certain country centres. The equipment at these points permits the direct transmission and reception of overseas photo-telegrams. In 1957–58, 6,623 picturegrams were lodged for destinations within Australia, 1,970 photo-telegrams were transmitted to oversea destinations and 4,371 were received from other countries.

Teletypewriter services (i.e., typewriting over electrical circuits), affording the great advantage of direct and instantaneous communication between points within the same building or separated by distances up to thousands of miles, and printergram services, that is, leased teletypewriter channels between the premises of subscribers and chief telegraph offices for the transmission and reception of telegrams, are available. The number of printergram services rose from 266 to 369 during 1957–58. Messages transmitted over these services decreased from 760,000 during 1956–57 to 645,000 during 1957–58. The first automatic satellite teletypewriter exchange unit was brought into operation at Hobart in April, 1958. This unit gives Hobart subscribers direct access to the Launceston switching centre. In addition, Sydney and Melbourne subscribers can now lodge oversea telegrams direct to the Overseas Telecommunication Commission, thereby reducing operating costs and transmission time. The International Telex service became available to subscribers to the teletypewriter exchange service from October, 1958. Initial countries participating include the United Kingdom, United States of America, Canada and Japan, but the service will be extended progressively to include all major oversea countries.

2. **Telegraph and Telephone Mileage.**—At 30th June, 1958, the combined single-wire mileages for both telegraph and telephone purposes were:—aerial, underground and submarine cables—exchange 7,196,000 miles, trunk telephone and telegraph 237,000 miles; aerial wires—telephone, trunk and/or telegraph purposes 564,000 miles, exchange and non-exchange service lines 739,000 miles. The mileages of conduits and pole routes were 11,800 duct miles and 120,000 miles respectively. Conduits include only ducts and conduits with an internal diameter of 2 inches or over. Those with a diameter of less than 2 inches are not recorded separately and are included with underground cables. The mileages in each State at 30th June, 1958 may be found in *Transport and Communication*, Bulletin No. 49.

Joint use is now made of poles for power and telephone reticulation; this scheme operates extensively throughout the United States of America and Canada.

3. **Telegraph Offices.**—(i) *States.* The numbers of telegraph offices, including railway telegraph offices, in the various States at 30th June, 1958 were:—New South Wales, 3,086; Victoria, 2,330; Queensland, 1,778; South Australia, 962; Western Australia, 978; Tasmania, 574.

(ii) *Australia.* The numbers of telegraph offices in Australia at 30th June of each of the years 1954 to 1958 respectively were:—9,909, 9,907, 9,896, 9,934 and 9,708.

4. **Telegrams Dispatched within Australia.**—(i) *States.* The following table shows the number of telegrams dispatched to places within the Commonwealth and to adjacent islands and to ships at sea, according to the class of message transmitted:—

TELEGRAMS DISPATCHED, 1957-58.  
(’000.)

State.	Paid and Collect.						Unpaid (Service).	Total Telegrams.
	Ordinary.	Urgent.	Press.	Letter-grams.	Radio-grams.	Meteorological.		
New South Wales	6,546	320	59	21	72	201	7,219	7,495
Victoria ..	3,948	166	18	15	6	124	4,277	4,426
Queensland ..	3,392	121	34	14	53	174	3,788	3,948
South Australia	1,585	52	24	11	48	89	1,809	1,862
Western Australia	1,502	39	15	19	63	137	1,775	1,827
Tasmania ..	454	14	5	6	1	43	523	549
<b>Australia ..</b>	<b>17,427</b>	<b>712</b>	<b>155</b>	<b>86</b>	<b>243</b>	<b>768</b>	<b>19,391</b>	<b>20,107</b>

(ii) *Australia.* Telegrams dispatched to destinations within Australia and to adjacent islands and to ships at sea, during each of the years 1953-54 to 1956-57 respectively, numbered:—22,536,000, 22,713,000, 22,600,000 and 21,144,000.

#### § 4. Telephones.

1. **General.**—Particulars of the total mileage of lines used exclusively for telephone purposes are not available, but are combined with all other line mileage. Particulars of the total single wire mileage used for telephone, trunk and/or telegraph purposes are shown in § 3, para. 2, above.

During 1957-58, 139,107 telephone subscribers' lines and 205,861 telephones were added to the system, compared with 125,570 lines and 185,093 telephones in 1956-57. As 8,786 of the subscribers' lines installed in 1957-58 were duplex services, the increase in telephone services was 147,893. With an average at 30th June, 1958, of twenty telephones to every 100 persons, Australia had a telephone density exceeded by that of only seven other countries. The trunk line network was increased by 72,615 channel miles and at 30th June, 1958 had reached 1,064,644 miles; 56,261 additional channel miles were obtained by the installation of carrier-wave equipment, some of which was installed on radio-telephone bearers. Carrier-wave facilities enable several speech paths to be obtained from one pair of wires or, in the case of radio-telephone systems, without wires at all, and are designed to transmit the voice with greater fidelity than the wire pairs on which they are based. An alternative aerial route between Sydney-Melbourne-Adelaide has been completed and provides a direct route for traffic from Sydney to Adelaide and Perth. Sixteen additional trunk line channels are being provided between Tasmania and the mainland. A new pair of wires has been erected between Marree and Alice Springs to be used as a bearer for a twelve-channel system between Adelaide and Alice Springs.

Six automatic exchanges were brought into operation in metropolitan areas during the year, together with 22 country and 145 rural automatic exchanges. At 30th June, 1958, there were 299 automatic exchanges in the metropolitan areas and 1,196 in country districts, to which 1,416,000 telephones were connected, representing 73 per cent. of the total number in use in Australia.

The development of transit trunk switching was advanced by the installation at a number of exchanges of through trunk switching equipment which enables calls to be routed automatically through major provincial and capital city switching points. This is part of a master plan for the long range development of the telephone system, which envisages a completely automatic network with the connexion of calls, both local and trunk, under the direct control of the subscriber and known as Subscriber Trunk Dialling. Manual trunk service would be available for special calls.

The first of several subscribers' radio-telephone networks, planned for outback areas, was brought into service in the Broken Hill district in April, 1958. The transmitter-receiver and aerial equipment are leased to subscribers and the base station operates from the post office, where the radio-telephone network connects with the Commonwealth telephone system.

An automatic weather forecast system was introduced at Melbourne in October, 1957 and similar equipment is on order for Sydney.

2. **Summary.**—Particulars relating to the telephone services in each State at 30th June, 1958 are shown in the following table:—

**TELEPHONE SERVICES: SUMMARY, 30th JUNE, 1958.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Exchanges .. .. .	2,323	1,775	1,348	711	767	402	7,326
Telephone offices (including ex- changes) .. .. .	3,344	2,775	1,928	1,150	1,096	548	10,841
Lines connected .. .. .	'000 515	425	182	121	78	41	1,362
Instruments connected .. .. .	'000 749	610	243	170	109	56	1,937
(i) Subscribers' instruments '000	733	598	236	165	105	54	1,891
(ii) Public telephones '000	7.9	5.6	3.4	1.8	1.5	0.9	21.1
(iii) Other local instruments '000	8.0	6.9	3.6	2.8	2.2	1.1	24.6
Instruments per 1,000 of population	201	223	172	185	155	167	197

Of the total telephones (1,936,960) in service at 30th June, 1958, 707,733 or 37 per cent. were connected to exchanges situated beyond the limits of the metropolitan telephone networks.

3. **Daily Local Calling Rates.**—The next table shows the average number of outward local calls daily per line at central, suburban and country telephone exchanges in the several States for 1957-58:—

**TELEPHONES: DAILY LOCAL CALLING RATE AT EXCHANGES, 1957-58.**

Exchanges.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Central .. .. .	9.65	10.67	10.81	8.99	9.36	4.44	9.54
Suburban .. .. .	3.42	3.08	2.40	2.66	2.52	2.54	3.14
Country .. .. .	1.86	1.28	1.73	1.25	1.31	1.68	1.58

A comparison of the average daily calling rates for each class of exchange shows that Queensland registered the greatest number of calls per line at central exchanges, and New South Wales at both suburban and country exchanges.

4. **Effective Paid Local Calls.**—The numbers of effective paid local calls from subscribers' and public telephones in the various States during 1957-58 appear hereunder.

**TELEPHONES: NUMBER OF EFFECTIVE PAID LOCAL CALLS, 1957-58.**

(Million.)

Calls.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Subscribers' .. .. .	498	357	136	92	70	28	1,181
From public telephones .. .. .	52	32	12	9	7	2	114
Total .. .. .	550	389	148	101	77	30	1,295

5. **Trunk Line Calls and Revenue.**—In the next table the number of telephone trunk line calls recorded, the amount of revenue received, and the average revenue per call are shown for each State and Australia for the year 1957-58.

**TELEPHONES: TRUNK LINE CALLS AND REVENUE, 1957-58.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Total calls .. .. .	'000 38,012	31,403	20,107	10,604	6,638	5,790	112,554
Total revenue .. .. .	£'000 7,292	5,289	3,544	1,924	1,038	716	19,803
Average revenue per call .. .. . pence	46.04	40.42	42.30	43.55	37.53	29.69	42.23

The number of trunk line calls during 1957-58 increased by 6.6 million, or 6 per cent., compared with the figure for the previous year, whilst the average revenue per call increased by 3.9 per cent.

6. **Oversea Telephone Services.**—During the year 1957-58, radio-telephone services were established between Australia and Madang (via Port Moresby), Iran, Portugal and Romania (via London), bringing the number of countries with which radio-telephone communication is available to 98. In addition, arrangements were made for calls, to and from Scotts Base, Antarctica, to be switched via New Zealand. A direct service was established with Japan in March, 1958 to replace the link via Hong Kong. Service is also provided to certain trans-Atlantic liners, ships off the Australian coast, H.M.A. ships, and H.M.N.Z. ships when cruising in Australian waters.

The amount of traffic handled over the radio-telephone services increased by 12 per cent. over that handled in 1956-57. During 1957-58, the number of calls connected was 79,242, comprising 40,149 originating in Australia and 39,093 incoming calls.

7. **Revenue from Telephones.**—Particulars regarding the revenue from telephone services are included in tables in § 1 (see pp. 551-2).

8. **World Telephone Statistics, 1958.**—Information derived, in the main, from statistics compiled by the American Telephone and Telegraph Company shows that at 1st January, 1958, there were more than 118 million telephones in use throughout the world. The United States of America, with over 63 million, possessed by far the greatest proportion of these (54 per cent.). The United States of America also had the highest recorded number of instruments per 100 population, namely, 37. Figures for other leading countries were as follows:—Sweden 33, Canada 29, New Zealand 27, Switzerland 27, Denmark 21. At June, 1958, the number of telephones in Australia per 100 persons was 20.

### § 5. Cable and Radio Communication.

1. **General.**—Descriptions of the various cable services between Australia and other countries were given in Official Year Book No. 22, pages 335-6 and earlier issues.

Competition from beam wireless services brought about a merger between cable and wireless interests, which was not, however, completely satisfactory in combining the advantages of both systems. Details of the merger, and of subsequent developments which led eventually to the establishment, in 1946, of the Overseas Telecommunications Commission, were published in Official Year Book No. 37, pages 220-4.

2. **Oversea Cable and Radio Traffic.**—(i) *States.* The number of telegrams received from and dispatched overseas in each State during 1957-58 is shown hereunder:—

#### INTERNATIONAL TELEGRAMS, 1957-58.

('000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Received .. ..	676	527	73	63	68	(a) 23	1,430
Dispatched .. ..	632	452	87	80	76	20	1,347
<b>Total .. ..</b>	<b>1,308</b>	<b>979</b>	<b>160</b>	<b>143</b>	<b>144</b>	<b>43</b>	<b>2,777</b>

(a) Estimated.

(ii) *Australia.* (a) *Number of Telegrams.* The following table shows the number of international telegrams received from and dispatched overseas during the years 1953-54 to 1957-58:—

#### INTERNATIONAL TELEGRAMS: AUSTRALIA.

('000.)

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Received .. ..	1,308	1,422	1,441	1,454	1,430
Dispatched .. ..	1,283	1,376	1,374	1,367	1,347
<b>Total .. ..</b>	<b>2,591</b>	<b>2,798</b>	<b>2,815</b>	<b>2,821</b>	<b>2,777</b>

(b) *Number of Words.* Particulars of the international business, originating and terminating in Australia, transacted over the cable and radio services during 1957-58 are shown in the following table:—

**INTERNATIONAL TELEGRAMS: NUMBER OF WORDS, AUSTRALIA, 1957-58.**  
(’000 Words.)

Class of Telegram.	Words Transmitted to—			Words Received from—		
	United Kingdom.	Other Places.	Total.	United Kingdom.	Other Places.	Total.
Ordinary .. ..	4,567	7,910	12,477	4,010	6,468	10,478
Letter .. ..	5,084	9,681	14,765	4,776	7,939	12,715
Press .. ..	2,591	1,015	3,606	7,080	3,089	10,169
Government .. ..	428	1,005	1,433	1,425	1,698	3,123
Greetings .. ..	824	686	1,510	692	801	1,493
Other .. ..	..	11	11	..	57	57
<b>Total .. ..</b>	<b>13,494</b>	<b>20,308</b>	<b>33,802</b>	<b>17,983</b>	<b>20,052</b>	<b>38,035</b>

Words transmitted to "Other places" included 3,343,743 to the United States of America and 4,027,803 to New Zealand and the Pacific Islands. Words received from "Other places" included 3,295,735 from the United States of America and 4,830,131 from New Zealand and the Pacific Islands.

3. *Coast Stations.*—At 30th June, 1958, there were 67 radio stations established at points around the Australian coast and 13 about the coast of Papua and New Guinea and other External Territories. During the year ended 31st March, 1958, these stations handled 658,583 messages (562,810 paying, 14,576 free traffic and 81,197 meteorological) with a total of 14,267,697 words.

4. *Radio-communication Stations Authorized.*—(i) *States and Territories, 30th June, 1958.* The following table shows particulars of the different classes of radio-communication stations authorized in Australia and the External Territories at 30th June, 1958. Figures relate to radio-communication (radio telegraph and radio telephone) stations only; particulars of broadcasting stations and of broadcast listeners' licences are shown on pages 563 and 568.

Owing to the use of a new classification, some of the figures in the table below are not comparable with those published in issues of the Official Year Book prior to No. 44.

**RADIO-COMMUNICATION STATIONS AUTHORIZED, 30th JUNE, 1958.**

Class of Station.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	Ext. Terr.	Grand Total.
<b>TRANSMITTING AND RECEIVING.</b>											
<b>Fixed(a)—</b>											
Aeronautical(a) .. ..	26	5	16	6	15	6	9	1	84	19	103
Services with other Countries	51	15	..	..	9	..	..	..	75	12	87
Outpost(b) .. ..	175	..	342	115	285	14	150	..	1,081	347	1,428
Other .. ..	193	124	120	49	46	26	16	..	574	38	612
<b>Land(c)—</b>											
Aeronautical .. ..	19	8	20	7	18	6	6	1	85	16	101
<b>Base—</b>											
Land Mobile Services ..	618	475	280	180	90	71	10	12	1,736	..	1,736
Harbour Mobile Services	16	11	9	5	27	..	..	..	68	..	68
Coast(d) .. ..	17	7	12	7	12	11	1	..	67	13	80
Special Experimental ..	51	30	8	13	15	10	..	1	128	..	128
<b>Mobile(e)—</b>											
Aeronautical .. ..	..	..	..	..	..	..	..	..	(f) 389	..	389
Land Mobile Services ..	6,618	4,221	2,164	1,680	1,041	385	59	203	16,371	84	16,455
Harbour Mobile Services	98	73	27	24	47	..	..	..	269	15	284
Outpost .. ..	..	..	..	..	..	..	..	..	(f) 715	..	715
Ship .. ..	..	..	..	..	..	..	..	..	f 1,694	139	1,833
Amateur .. ..	1,178	1,140	402	419	236	123	11	25	3,534	77	3,611
<b>Total .. ..</b>	<b>9,060</b>	<b>6,109</b>	<b>3,400</b>	<b>2,505</b>	<b>1,841</b>	<b>652</b>	<b>262</b>	<b>243</b>	<b>(g) 26,870</b>	<b>(g) 760</b>	<b>(g) 27,630</b>

NOTE.—For footnotes see next page.

RADIO-COMMUNICATION STATIONS AUTHORIZED, 30th JUNE, 1958—*continued.*

Class of Station.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	Ext. Terr.	Grand Total.
RECEIVING ONLY.											
Fixed .. .. .	80	185	62	11	35	1	..	..	374	..	374
Land .. .. .	..	..	..	..	..	..	..	..	..	..	..
Mobile .. .. .	1	34	26	..	..	..	..	..	61	..	61
<i>Total</i> .. .. .	<i>81</i>	<i>219</i>	<i>88</i>	<i>11</i>	<i>35</i>	<i>1</i>	<i>..</i>	<i>..</i>	<i>435</i>	<i>..</i>	<i>435</i>

## TOTAL STATIONS AUTHORIZED.

Grand Total .. .. .	9,141	6,328	3,488	2,516	1,876	653	262	243	27,305 <sup>(g)</sup>	760	28,065 <sup>(g)</sup>
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(a) Stations established at fixed locations for communication with other stations similarly established. (b) Stations established in out-back areas for communication with control stations such as those of the Royal Flying Doctor Service. (c) Stations established at fixed locations for communication with mobile stations. (d) Land stations for communication with ocean-going vessels. (e) Equipment installed in aircraft (aeronautical), motor vehicles (land mobile services), harbour vessels (harbour mobile services) and ocean-going vessels (ship) and mobile equipment of organizations such as the Royal Flying Doctor Service. (f) Stations which cannot be classified according to States, etc. (g) Includes 2,798 mobile stations, which cannot be classified according to States, etc.

(ii) *Australia and External Territories, 30th June, 1954 to 1958.* The number of radio-communication stations authorized in Australia and the External Territories at 30th June, 1954 to 1958 is shown in the following table.

## RADIO-COMMUNICATION STATIONS AUTHORIZED: AUSTRALIA AND EXTERNAL TERRITORIES.

Stations in—	At 30th June—				
	1954.	1955.	1956.	1957.	1958.
Australia .. .. .	12,271	15,808	19,778	23,227	27,305
External Territories .. .. .	379	421	456	642	760
<b>Total Stations</b> .. .. .	<b>12,650</b>	<b>16,229</b>	<b>20,234</b>	<b>23,869</b>	<b>28,065</b>

## B. BROADCASTING AND TELEVISION.

## § 1. Introductory.

1. *General.*—Broadcasting and television services in Australia operate under the Broadcasting and Television Act 1942-1956 and comprise the National Broadcasting Service, the National Television Service, the Commercial Broadcasting Service and the Commercial Television Service. General control of these services is a function of the Australian Broadcasting Control Board (*see* para. 2 below). Details of each service will be found on pages 563-8.

Licence fees for commercial broadcasting and television stations are payable under the Broadcasting and Television Stations Licence Fees Act 1956.

**2. The Australian Broadcasting Control Board.**—The Board, which was constituted on 15th March, 1949, operates under the Ministerial jurisdiction of the Postmaster-General, and its principal functions, as set out in section 16 of the Broadcasting and Television Act 1942–1956, are to ensure:—(a) that services by broadcasting stations and television stations are provided in accordance with plans prepared from time to time by the Board and approved by the Minister; (b) that the technical equipment and operation of such stations are in accordance with such standards and practices as the Board considers to be appropriate; and (c) that adequate and comprehensive programmes are provided by the stations to serve the best interests of the general public.

In addition, the Board may exercise such other functions as are prescribed in relation to broadcasting stations and television stations.

The Board is empowered to make recommendations to the Minister as to the exercise by the Minister of any power under Part IV. of the Act which relates to the Commercial Broadcasting Service.

The Board has power, subject to the direction of the Minister:—(a) to determine the situation and operating power of a broadcasting or television station; (b) to determine the frequencies of broadcasting and television stations within bands of frequencies notified to the Board by the Postmaster-General as being available; (c) to regulate the establishment and operation of networks of commercial broadcasting or television stations and the making of arrangements by licensees for the provision of programmes or the broadcasting or televising of advertisements.

The Board also has power:—(a) to determine the conditions subject to which advertisements may be broadcast or televised by licensees; (b) to determine the hours during which programmes may be broadcast or televised; and (c) to conduct examinations as to the competency of persons to operate the technical equipment of broadcasting and television stations and to charge appropriate fees.

The Board is obliged to hold public inquiries into applications, made to the Minister, for licences for commercial broadcasting and television stations in areas for which the Minister proposes to grant licences and into any other matter within its functions if the Board thinks it necessary or desirable, or the Minister so directs. The Board, in exercising its powers and functions in relation to commercial broadcasting and television stations, is obliged to consult representatives of those stations.

Subject to the approval of the Minister and of the Treasurer, the Board may provide financial and other assistance to commercial broadcasting stations for the purpose of ensuring that programmes of adequate extent, standard and variety are provided in the areas served by these stations.

Section 8 of the Act provides that the Board shall consist of five members (including two part-time members) appointed by the Governor-General, one of whom, other than a part-time member, shall be chairman. No person shall be appointed as a member of the Board who:—(a) has any financial interest whether direct or indirect, in any company which is the licensee of, or an applicant for a licence for, a commercial broadcasting or television station or manufactures or deals in equipment for the transmission or reception of broadcasting or television programmes; (b) is a member of the governing body of any company or other association of persons which is the licensee of, or an applicant for a licence for, a commercial broadcasting or television station; or (c) is the licensee of, or an applicant for a licence for, a commercial broadcasting or television station.

**3. The Australian Broadcasting Commission.**—The Broadcasting and Television Act 1942–1956, provides that the Australian Broadcasting Commission, which consists of seven members, one of whom shall be a woman, shall control the activities of the National Broadcasting Service and the National Television Service.

Under the provisions of the Act the Commission shall provide, and shall broadcast or televise from transmitting stations made available by the Postmaster-General, adequate and comprehensive programmes and shall take in the interests of the community all such measures as, in the opinion of the Commission, are conducive to the full development of suitable broadcasting and television programmes.

The Commission prepares estimates of its receipts and expenditure for each financial year and submits these estimates to the Minister. Appropriations are made by Parliament for the purposes of the Commission and these, together with all other moneys received by the Commission, are paid into an account in the Commonwealth Bank of Australia. From this account are defrayed all costs, charges, expenses, etc., incurred by the Commission in the exercise of its powers and functions under the Act. For particulars of the financial operations of the Commission see Chapter XXI.—Public Finance.

## § 2. Broadcasting.

1. **Broadcasting Stations.**—The following table shows the number of broadcasting stations in operation at 30th June, 1958:—

BROADCASTING STATIONS, 30th JUNE, 1958.

Type of Station.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Papua and New Guinea.	Total.
National—										
Medium Fre-										
quency ..	15	5	12	8	7	4	2	2	1	56
High Frequency ..	1	3	2	..	2	..	..	..	1	9
Commercial ..	37	20	20	8	14	8	..	1	..	108

2. **The National Broadcasting Service.**—(i) *General.* In sound broadcasting, the programmes of the National Broadcasting Service are provided by the Australian Broadcasting Commission and the provision and operation of transmitters and technical facilities in the studios are the responsibility of the Postmaster-General's Department.

(ii) *Technical Facilities.* At 30th June, 1958, the National Broadcasting Service comprised 65 transmitting stations, as follows:—

*Medium-frequency Stations—**New South Wales—*

2BL and 2FC Sydney, 2BA Bega, 2CO Albury, 2CR Orange, 2GL Glen Innes, 2KP Kempsey, 2LG Lithgow, 2ML Murwillumbah, 2NA and 2NC Newcastle, 2NB Broken Hill, 2NR Grafton, 2NU Tamworth, 2TR Taree.

*Victoria—*

3AR and 3LO Melbourne, 3GI Sale, 3WL Warrnambool, 3WV Horsham.

*Queensland—*

4QG and 4QR Brisbane, 4AT Atherton, 4GM Gympie, 4QA Mackay, 4QB Maryborough, 4QL Longreach, 4QN Townsville, 4QS Toowoomba, 4QY Cairns, 4RK Rockhampton, 4SO Southport.

*South Australia—*

5AN and 5CL Adelaide, 5CK Port Pirie, 5LN Port Lincoln, 5MG Mt. Gambier, 5MV Renmark, 5PA Penola, 5WM Woomera.

*Western Australia—*

6WF and 6WN Perth, 6AL Albany, 6GF Kalgoorlie, 6GN Geraldton, 6NM Northam, 6WA Wagin.

*Tasmania—*

7ZL and 7ZR Hobart, 7NT Launceston, 7QN Queenstown.

*Northern Territory—*

5AL Alice Springs, 5DR Darwin.

*Australian Capital Territory—*

2CN and 2CY Canberra.

*Papua—*

9PA Port Moresby.

*High-frequency Stations—*

VLI Sydney, New South Wales, VLG, VLH and VLR Lyndhurst, Victoria, VLQ and VLM Brisbane, Queensland, VLW and VLX Perth, Western Australia, VLT Port Moresby, Papua.

The medium-frequency transmitters operate in the broadcast band 540 to 1,600 kilocycles per second. The high-frequency stations, using frequencies within the band 3 to 30 megacycles per second, provide service to listeners in sparsely populated parts of Australia such as the north-west of Western Australia, the Northern Territory, and northern and central Queensland and in Papua and New Guinea and adjacent islands.

Many of the programmes provided by country stations are relayed from the capital cities, high-quality programme transmission lines being used for the purpose. A number of programme channels are utilized to link national broadcasting stations in the capital cities of Australia and, when necessary, this system is extended to connect both the national and commercial broadcasting stations.

In June, 1958, 44 of the medium-frequency stations were situated outside the six State capital cities. Additional country stations are to be established and, when these additions are complete, the medium-frequency and high-frequency stations together will provide for clear reception of the programmes of the National Broadcasting Service in practically every part of Australia.

(iii) *Programme Facilities. (a) General.* The programmes of the Australian Broadcasting Commission cover a wide range of activities, which are indicated briefly in the following paragraphs. The proportion of broadcasting time allocated to the various types of programme during 1957-58 was as follows:—Classical Music, 23.2 per cent.; Light Music, 11.7 per cent.; Variety, 21.0 per cent.; News, 7.9 per cent.; Talks, 6.9 per cent.; Sport, 4.5 per cent.; Drama and Features, 4.0 per cent.; Youth Education, 3.6 per cent.; Religion, 3.5 per cent.; Parliament, 4.2 per cent.; Children's Session, 2.3 per cent.; Rural Broadcasts, 1.7 per cent.; Non-departmental, 5.5 per cent.

(b) *Music.* The A.B.C., in addition to its extensive activities in the field of musical broadcasting, is one of the largest concert-giving organizations in the world. During the years of the Commission's existence, there has been an immense growth of interest in fine music. Today the regular broadcasts command a large listening audience and the number of subscribers to A.B.C. public concerts exceeds 50,000. This vigorous musical life is typified in the activities of the symphony orchestras in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart. These have developed from the studio broadcasting orchestras set up in 1936 in the six capital cities to bodies whose present standard compares favourably with that of orchestras in overseas musical centres of similar size. Until 1946, these orchestras were maintained solely by the A.B.C., but since then they have been subsidized by State Governments and major municipal bodies.

In 1957-58, the A.B.C. organized 530 public orchestral concerts (including 165 free concerts for school children and 36 free concerts for adults) and 238 public recitals by famous artists throughout the Commonwealth. Of these concerts, 263 were given outside the State capitals, including 75 free orchestral concerts for school children.

The policy of the A.B.C. has been to foster the highest standards of musical appreciation and performance, making the utmost use of the best local talent and at the same time giving Australian audiences the opportunity of hearing leading artists from overseas.

(c) *Drama and Features.* Drama programmes are designed to give listeners opportunities, which they might not otherwise have, of hearing the world's great plays as well as adaptations of the best modern stage plays and also those written specially for broadcasting. The main regular drama programmes are broadcast on Sunday afternoons and Sunday and Monday evenings, and special series of longer plays are also given at various times.

In recent years the technique of the feature programme has also been developed. The feature is a form of entertainment which is unique to radio, consisting of specially written programmes designed to present information in an interesting way. It may deal with a very wide variety of subjects ranging from history and current events to science and the arts. A number of Australian writers have become interested in this form of entertainment and about 97 per cent. of the features broadcast are written by Australians. Local writers also contribute a large proportion of the plays broadcast and every effort is made to assist and encourage their work.

(d) *Youth Education.* The A.B.C. provides a regular series of broadcasts to schools as an addition to normal class-room education. The total number of listening schools at the end of June, 1958 was 9,462 or about 93 per cent. of all schools, State and private, throughout the Commonwealth. Many of the school broadcasts are presented in dramatized form, as this method makes the material more vivid and interesting to the young listener. For the very young children, the Commission broadcasts every week-day the "Kindergarten of the Air", a type of broadcast which originated in Australia. (See also Chapter XV.—Education, on this subject.)

(e) *Talks.* The aim of the Talks Department is to provide programmes which will keep the listener well informed on current affairs and on general topics. Many of the talks in the first category are now presented in a magazine type of session consisting of a number of short items linked by a narrator. An extension of this type of programme is the documentary, in which radio goes into the field to analyse or to describe, using the actual sounds and voices recorded on location.

Major controversial topics are covered in the "Nation's Forum of the Air" (using the debating technique) and "I Put it to You", in which a well-known speaker presents a contentious theme before an audience chosen because it will generally be critical and afterwards the speaker must stand up to questioning by the audience. Another outstanding session is "News Review", containing at least five comments on the news of the day recorded over landline from all States of the Commonwealth and, in the case of significant world events, from overseas by radio-telephone.

(f) *Rural Broadcasts.* The Rural Broadcasts Department devotes its programmes to weather and market reports and talks, interviews, etc., designed to provide useful information for the man on the land. These programmes are presented on a regional, State and national

basis, many being directed to particular districts, because of the diversity of climate and conditions. Separate rural programmes originate at 18 regional stations and are relayed to all other regionals. Other programmes are broadcast throughout each State or on a national relay, depending on whether the information they contain is of general interest or refers only to the rural industries of one State.

Material for rural programmes is obtained from many sources in Australia, including the Departments of Agriculture, numerous government and private organizations and practical farmers. Talks, interviews, etc., are also secured from many overseas sources, thus bringing to rural listeners the latest information on overseas research that is relevant to Australia's primary industries. Programme material is exchanged regularly with British Commonwealth countries and with the U.S.A. and a number of officers from the broadcasting organizations of South-East Asia have come to Australia, under the Colombo Plan and similar projects, to study A.B.C. rural broadcasting, with the aim of developing services of this type in their own countries.

During 1957-58, 6,842 talks and interviews on rural topics were broadcast by the A.B.C., as well as 9,300 weather reports and 10,466 interstate and local market reports. In times of emergency, the regular weather reports are supplemented by special services giving flood or fire warnings—a very important service because of the speed with which radio can reach a widely scattered audience.

(g) *News.* On 1st June, 1947, the Australian Broadcasting Commission's independent news service came into full operation. Since that date the Commission has collected all its Australian (including Papua and New Guinea) news through its own staff journalists and part-time correspondents. It also maintains a news room in London for the selection and transmission of news obtained from major overseas agencies and has special representatives in South-East Asia. Regional bulletins are broadcast from country centres and also from capital cities to cover near-city districts. Radio Australia (the Overseas Service of the A.B.C.) broadcasts Australian and overseas news daily in English, French, Mandarin, Indonesian and Thai, with special attention to Asia and the Pacific. Each day the A.B.C. re-broadcasts two news bulletins from the British Broadcasting Corporation. The A.B.C. broadcasts 150 news bulletins each day, including those given over Radio Australia.

(h) *Other Activities.* The broadcasting of the proceedings of Federal Parliament commenced as a regular service in July, 1946. At present, these broadcasts are confined to one of the two national transmitters in each capital city, one in Newcastle and to one domestic short-wave station (VLR).

The National Children's Hour, presented seven days a week, is composed of over 40 programme items, including stories, music, games, and items about art, literature, natural history and sport. There is a children's newsreel and a Brains Trust, discussing, through children, topics of wide general interest. The Argonauts' Club is an important part of the session and encourages children between the ages of 7 and 17 in self-expression and the appreciation of cultural subjects, but the provision of entertainment suitable for children is the main purpose of the session.

In co-operation with the various religious denominations, the A.B.C. broadcasts several religious sessions each week-day in addition to those given on Sundays. These religious broadcasts include relays of normal church services and a variety of special programmes of talks and sacred music. The modern trend towards the use of religious drama is also followed.

The variety and sporting programmes of the A.B.C. provide the lighter side of the service. In its variety sessions the A.B.C. does everything possible to assist local artists in order to increase the amount of first-class talent in this country, and encouragement is also given to Australian composers of light music. The A.B.C. dance bands in Sydney and Melbourne are regarded as being two of the most outstanding bands in Australia.

The coverage of sport at home and abroad by the A.B.C. is comprehensive. On Saturday afternoons the sporting panel provides listeners with progress results, scores and descriptions from half a dozen or more fields of sport. Events of international interest such as Test matches, the Davis Cup, etc., are covered by simultaneous descriptions from A.B.C. commentators. In covering events overseas, the A.B.C. is indebted to the B.B.C. for its collaboration in Great Britain, to the New Zealand Broadcasting Service for events in New Zealand and to broadcasting organizations in many other countries.

3. *The Commercial Broadcasting Service.*—Commercial broadcasting stations are operated under licences granted and renewed by the Postmaster-General after taking into consideration any recommendations which have been made by the Board. The initial period of a licence is five years and renewals are granted for a period of one year. The fee payable for a licence is £25 on the grant of the licence, and thereafter £25 a year plus one per cent. of the gross earnings of the station from the broadcasting of advertisements or other matter during the preceding financial year. Licensees of these stations rely for their income on the broadcasting of advertisements and other publicity.

At 30th June, 1958, there were 108 commercial broadcasting stations in operation. A table showing the call sign, location, frequency and aerial power of each commercial broadcasting station licensed at 30th June, 1958 may be found in *Transport and Communication*, Bulletin No. 49.

4. **Overseas Broadcasting Service.**—There are five high-frequency stations at Shepparton, Victoria (VLA, VLB, VLC, VLD, VLG) which provide the oversea service known as "Radio Australia". As in the case of the National Broadcasting Service, these stations are maintained and operated by the Postmaster-General's Department and their programmes are arranged by the A.B.C. During certain periods, station VLG Lyndhurst is also used for the transmissions of the domestic short-wave service. The programmes, which give news and information about Australia, presented objectively, as well as entertainment, are directed mainly to South-East Asia and the Pacific. The oversea audience has grown very substantially in recent years, as evidenced by a large and increasing number of letters from listeners abroad.

### § 3. Television.

1. **General.**—Television services in Australia operate under the Broadcasting and Television Act 1942-1956 and comprise the National Television Service and the Commercial Television Service.

2. **The National Television Service.**—(i) *General.* The A.B.C. provides the programmes for the National Television Service from stations made available for the purpose by the Postmaster-General. Two stations have been established, ABN Sydney and ABV Melbourne, both operating on Channel 2. ABN commenced operations on 5th November, 1956 and ABV on 18th November, 1956. Both stations operate on a frequency of 64.25 megacycles a second for vision and 69.75 mc/s. for sound.

(ii) *Programme Facilities.* (a) *General.* The television programmes provided by the A.B.C. cover a wide range of activities. The proportion of television time allocated among the A.B.C.'s various departments to 30th June, 1958 was as follows:—Talks Department, 21.0 per cent.; Drama and Features, 19.6 per cent.; Sport, 13.1 per cent.; Variety, 9.0 per cent.; Children's Session, 7.2 per cent.; News, 5.6 per cent.; Classical Music, 1.7 per cent.; Light Music, 1.5 per cent.; Rural Services, 2.0 per cent.; Religion, 2.7 per cent.; Youth Education, 2.5 per cent.; Non-departmental (including trade demonstration films), 14.1 per cent. A summary of the activities of the departments in the field of television is given in the following paragraphs. Transmission hours in Sydney and Melbourne totalled 4,177.

(b) *Talks.* In television, Talks covers a very wide field, ranging from commentaries on international affairs to panel games and outside telecasts of public events. Discussions, topical interviews, magazine programmes, women's programmes, demonstrations and film and studio documentaries are all part of the regular output.

(c) *Drama and Features.* A considerable proportion of television time is devoted to drama and features, and "live" television plays featuring Australian artists may usually be seen fortnightly both in Sydney and Melbourne.

(d) *Music.* During 1957, the A.B.C.'s musical activities extended to the field of television. A number of public concerts and studio performances were successfully telecast and there is reason to believe that the new medium will contribute to the further development of musical appreciation in Australia.

(e) *Rural Services.* The emphasis has been on providing information for consumers and on giving city viewers, by means of films, demonstrations, etc., a picture of Australia's rural industries. Regular programmes featuring many facets of Australian agriculture and livestock activities have already been given, and this work will be developed as further facilities become available. Weather reports and forecasts are also telecast on six evenings a week.

(f) *Youth Education.* The A.B.C. provides a television programme for very young children each week-day, under the title "Kindergarten Playtime". Experimental television programmes for schools are being presented.

(g) *News.* Television news bulletins and newsreels have been included in the programmes presented in both Sydney and Melbourne since the television services began in November, 1956.

(h) *Other Activities.* Special television programmes are presented for children, including filmed material obtained on an exchange basis from oversea television organizations. Church services have been televised in Sydney, Melbourne and Bathurst and other special religious programmes have been telecast. Outside broadcast cameras have covered a number of sporting events, including the Olympic Games, Davis Cup tennis, Test and Sheffield Shield cricket and swimming championships.

3. **The Commercial Television Service.**—Commercial television stations are operated under licences granted by the Postmaster-General. Licences for commercial television stations have been granted as follows:—Sydney—ATN (Channel 7), TCN (Channel 9); Melbourne—HSV (Channel 7), GTV (Channel 9); Brisbane—QTQ (Channel 9), BTQ (Channel 7); Adelaide—NWS (Channel 9), ADS (Channel 7); Perth—TVW (Channel 7) and Hobart—TVT (Channel 6). The stations commenced operations in Sydney and Melbourne on the following dates:—ATN, 2nd December, 1956; TCN, 16th September, 1956; HSV, 4th November, 1956; GTV, 19th January, 1957. The stations in Brisbane, Adelaide, Perth and Hobart are in course of construction.

The initial grant of a licence is for a period of five years and thereafter the licence is renewable annually. The fee payable is £100 for the first year and thereafter £25 a year plus one per cent. of the station's gross earnings from the televising of advertisements or other matter during the preceding financial year.

4. **Extension of Television Services.**—On 4th September, 1957, the Postmaster-General announced that the Government had decided to proceed with the second phase of the extension of television services by the establishment of national and commercial television stations in Brisbane, Adelaide, Perth and Hobart. This decision was in accordance with the policy announced by the Government in 1954, that television would be introduced on a gradual basis, the extent and timing of each stage in the development of the services being determined by the knowledge gained in the previous stages and by Australia's economic circumstances. The Postmaster-General stated that the Government had made a special examination of the financial aspects of the matter, from which it seemed evident that the revenue which would be received from viewers' licence fees (£5 a year) and from the excise duty of £6 on each cathode ray tube would ensure that the costs of the service would be borne by those who use it and that the programme of development would therefore impose no financial burden on the public in general.

Although the second stage in the development of television is confined to the remaining capital cities, the Government is anxious that television services should be available to people in other areas as soon as practicable. The question of the extension of television services to areas outside the capital cities will be considered by the Government during 1959.

The Broadcasting Control Board has prepared a provisional Frequency Assignment Plan which provides for the allocation of channels for four television services in each capital city and two services in every town with a population in excess of 5,000.

#### § 4. Licences, etc.

1. **Broadcast Listeners' and Television Viewers' Licences.**—(i) *General.* Broadcast listeners' and television viewers' licences are issued at post offices in accordance with the provisions of the Broadcasting and Television Act 1942–1956, which stipulates that, except as prescribed, a person shall not use, maintain or have in his possession a broadcast or television receiver unless there is in force a licence which applies to that receiver. A broadcast listener's licence authorizes the operation of any broadcast receiver, and a television viewer's licence any television receiver, which is:—(a) in the possession of the holder of a licence, or of a member of his family, at the address specified in the licence and/or ordinarily kept at that address; (b) installed in a vehicle which is ordinarily in the possession of the holder, or of a member of his family, and is ordinarily kept at that address while not in use.

The fee for a broadcast listener's licence or a renewal thereof is:—Zone 1, £2 15s.; Zone 2, £1 8s. Zone 1 is the area within approximately 250 miles of specified broadcasting stations and Zone 2 is the remainder of the Commonwealth. A television viewer's licence costs £5.

A licence may be granted at reduced rates to any person who (a) is in receipt of a pension under Part III. or Part IV. of the Social Services Act 1947–1957, or a service pension, or a pension in respect of total and permanent incapacity, under the Repatriation Act 1920–1956, or the Repatriation (Far East Strategic Reserve) Act 1956; and (b) lives alone, with another pensioner, or with any person whose income does not exceed the maximum amount of income and pension allowed under Part III. or Part IV. of the Social Services Act 1947–1957, or section 87 of the Repatriation Act 1920–1956. Licence fees for pensioners are as follows:—broadcast listener's licence—Zone 1, 10s.; Zone 2, 7s.; television viewer's licence, £1 5s.

A licence may be granted free of charge to a blind person over 16 years of age or to a person or authority conducting a school. A tourist resident in Australia for not more than six months and an oversea diplomatic or consular representative or a member of his staff is not required to hold a licence. Inmates of a hospital or charitable institution are covered by the licence held by the institution.

(ii) *Licences in Force. (a) Broadcast Listeners'.* The following table shows the number of broadcast listeners' licences in force at five-year intervals from 1925 to 1955, and for 1958.

#### BROADCAST LISTENERS' LICENCES IN FORCE.

At 30th June—	N.S.W.(a)	Vic.	Qld.	S.A.(b)	W.A.	Tas.	Aust.
1925 .. ..	34,857	20,290	1,267	3,331	3,562	567	63,874
1930 .. ..	111,253	140,072	23,335	25,729	5,755	6,048	312,192
1935 .. ..	279,166	237,247	67,546	76,515	41,257	20,121	721,852
1940 .. ..	458,256	348,264	151,152	124,928	87,790	42,191	1,212,581
1945(c) .. ..	548,074	394,315	180,089	146,611	98,210	47,930	1,415,229
1950(c) .. ..	683,271	505,078	260,033	195,261	133,199	64,369	1,841,211
1955 .. ..	746,050	549,690	293,542	223,593	150,199	71,602	2,034,676
1958 .. ..	784,897	557,960	320,626	238,916	159,551	75,915	2,137,865

(a) Includes the Australian Capital Territory. (b) Includes the Northern Territory. (c) Excludes licences for receivers in excess of one. These licences were introduced in July, 1942 and were abolished on 31st December, 1951.

Of the 2,137,865 broadcast listeners' licences in force at 30th June, 1958, 1,247,742 or 58 per cent. were held by persons living in metropolitan areas and 890,123 or 42 per cent. by persons in country areas. Of the latter, only 13,250 were in respect of Zone 2.

(b) *Television Viewers'.* The following table shows the number of television viewers' licences in force at 30th June and 31st December, 1957 and 1958.

#### TELEVISION VIEWERS' LICENCES IN FORCE.

Date.	N.S.W.	Vic.	Tas.	Australia.
30th June, 1957 .. ..	28,912	44,986	11	73,909
31st December, 1957 .. ..	74,627	91,922	27	166,576
30th June, 1958 .. ..	143,422	147,721	43	291,186
31st December, 1958 .. ..	232,473	222,172	51	454,696

2. **Radio-inductive Interference.**—In each State of the Commonwealth, the Postmaster-General's Department maintains a staff of experts with suitable equipment and transport, for the purpose of investigating complaints of radio-inductive interference to the reception of broadcast and television programmes and to defence and civil radio-communication services.

During the year 1957–58, 14,754 sources of trouble, including 2,241 affecting television reception, were eliminated as a result of Departmental efforts or by other action. More than 4,000 suppressors were fitted to offending appliances as recommended by investigating officers, who carried out 30,447 inspections in metropolitan and country areas.

3. **Prosecutions under the Broadcasting and Television Act.**—Persons convicted during the year ended 30th June, 1958 for operating unlicensed broadcast receivers numbered 5,051. Fines and costs amounting to £27,916 were imposed. During the year ended 30th June, 1958, 279 unlicensed viewers were convicted and fined a total of £2,241, including costs.

## CHAPTER XV.

### EDUCATION.

#### § 1. Introduction.

An account of the development of the Australian school system up to 1929 may be found in Official Year Books Nos. 1, 2, 17 and 22. In Official Year Book No. 40, a reasonably complete review of changes which occurred up to 1951 and of the practices then current was presented from material furnished in the main by the Commonwealth Office of Education.

In the sections which follow, the information relating to the educational programme applies mainly to the year 1958. The statistics given in the tables relate to 1957.

#### § 2. Government Schools.

1. *Administration.*—Education is mainly the responsibility of the State Governments but the Commonwealth Government provides financial assistance to students and meets the full cost of education in Commonwealth Territories (*see* Chapter V.)

Although there is a tendency towards regional administration, State educational administration is centralized. The permanent head of the Education Department in each State is responsible to the Minister for Education. Contact with the schools is maintained principally through Inspectors, called Superintendents in Western Australia and Tasmania. Departments are usually divided into primary, secondary and technical divisions. Some technical colleges are in a large measure autonomous. Universities are independent foundations although much of their income is derived from State and Commonwealth grants.

Examination Boards which represent universities, Education Departments and non-government schools, control public examinations and syllabuses, and curriculum committees prepare primary and secondary curricula. State Ministers for Education meet periodically as the Australian Education Council, and Directors of Education meet annually as a standing committee of this Council.

2. *The School System.*—(i) *Compulsory.* In all States, there is legislation for compulsory school attendance. The original Victorian Education Act was passed in 1872, followed by similar Acts in Queensland (1875), South Australia (1875), New South Wales (1880), and Tasmania and Western Australia (1893).

In 1958, the ages between which children were required by law to attend school were as follows:—New South Wales, 6 to 15 years; Victoria, 6 to 14 years; Queensland, 6 to 14 years; South Australia, 6 to 14 years (children may not leave school until the end of the term during which they reach the age of 14 years); Western Australia, 6 to 14 years; and Tasmania, 6 to 16 years. The employment of children of school age is prohibited by law.

In Victoria, South Australia, and Western Australia, amendments to the Acts have provided for the raising of the school leaving age to 15 years, but to date this legislation has not been proclaimed.

Schooling may be given in government schools (including correspondence and special schools), in non-government schools, or by private tuition. Schooling in government schools is ordinarily free. Non-government schools charge fees and are not usually assisted financially by State or Commonwealth Governments.

(ii) *Non-Compulsory.* In recent years, the development of large-scale industry and scientific farming has demanded a diversity of skills and a general raising of the educational level of the population. The raising of the school leaving age in two States and the tendency everywhere for children to stay longer at school have been expressions of public realization of this. In recent years, less than half of all children left school when they reached the age limit for compulsory attendance. Indeed, almost half now proceed to some form of further education beyond secondary school, either as full-time students, as part-time apprentices or trainees released during the day by their employers, or as part-time evening students.

In the early years of government provision of education, the main emphasis was on the primary school, which catered for children under compulsion and offered a course largely confined to the tool subjects, reading, writing and arithmetic. However, a process of extension and differentiation both at the bottom—infants' schools and kindergartens—and at the top—secondary schools—was well under way during the early years of this century.

3. The Educational Ladder.—(i) *Infants' Schools*. It is now customary, although not compulsory, for children to begin school when they are five years old. In larger primary schools they enter the infants' school, and in smaller schools infants' classes, which occupy two or three years, the first year in some States being called "Kindergarten" or "Preparatory". The emphasis in the infants' classes is very much on general development, on play activities and on the informal aspects of the educational processes. In some cases, the first two grades of primary education, together with any "Preparatory" or "Kindergarten" classes, are to be found in separate infants' schools or departments. But whether in a separate establishment or as a part of a primary school, there is a gradual move towards formal instruction. At the end of the period, most children are able to read with some fluency, carry out simple arithmetical operations founded on the basic number facts, and can write in pencil. In addition, they have acquired skills with art materials and the like. A good deal of the instruction is carried on through activity methods, involving, for example, dramatic work, puppetry, and school "shops". Children then pass at about the age of 8 or 9 to the more formal primary school, in which they normally spend four or five years.

(ii) *Primary Schools*. The main emphasis in the primary school as distinct from the infants' school still lies on the tool subjects (reading, writing and arithmetic) and, in more recent years, on oral language, but the methods of teaching have undergone considerable changes. Changes in the purpose and outlook of educationists, and the raising of the professional standards of teachers, have made for greater freedom for pupils and teachers, some departure from the methods of mass instruction, and the closer linking of the curriculum with the child's social environment.

In general, there is now less emphasis on results than formerly, and basic skills are taught at a somewhat later stage. At the same time, the curriculum has been broadened. More individual instruction has led to a reduction in minimum standards of achievement for the less able and a stress on curriculum enrichment for the bright. Retardation, i.e., the repeating of grades, has been considerably reduced, the aim being for each child to remain with his age group. In all States, opportunity classes exist for backward children, and in one State opportunity classes are provided for the especially bright.

(iii) *Secondary Schools*. At the age of 12 or 13 (in Queensland, 14), children transfer to a secondary school course. In the cities and larger country centres, this is provided in a separate school, but in less densely populated areas secondary classes share the same buildings as primary classes. In rural areas, secondary pupils may share teachers or classrooms with primary pupils, and in one-teacher schools a few secondary students may carry out correspondence assignments under the supervision of the primary teacher-in-charge.

Secondary curricula have developed from the matriculation requirements of the universities. Formerly English grammar and literature, and mathematics, including algebra, geometry and trigonometry, were the core. Languages, chiefly Latin and French, or science, chiefly physics and chemistry, and history had an important place. Geography and drawing were often taken in the first two or three years.

As a result of changes in the academic course for matriculation, greater emphasis has been placed on oral and written expression in the English course and on language generally (English or foreign languages); in two universities, new matriculation regulations require a pass in either mathematics or a foreign language (not necessarily Latin which, in recent years, has been less popular than previously). A general science course has been introduced in some States, and social studies, a synthesis of history, geography and civics, is a subject to matriculation level in two States. More emphasis has been placed on art, music and physical education. In recent years, the provision of a secondary education for all has gained ground rapidly, although the entrance requirements of tertiary institutions are still provided for.

Consequently, alongside the academic course, other courses have grown up. In country areas, they may be offered in the same school or the academic course may even be largely abandoned. In the city, it is usual to offer non-academic courses in separate schools. The academic schools and multi-lateral country schools are usually known as High Schools, while the other types are generally distinguished by such names as Junior Technical Schools and Home Science Schools.

Particular mention should be made of the recent development of the all-age consolidated school sometimes with an agricultural bias, found under various names in different States. Tasmania and South Australia adapted the idea of the English village area schools to Australian conditions and established "Area Schools", some of which have farms attached.

The courses followed in the non-academic schools are, in general, broader than in the academic schools. There is less concentration on establishing an academic discipline and method peculiar to each subject, but more attention to correlation between fields of knowledge, sometimes expressed by projects involving them all. Generally, less time is devoted to mathematics and the formal sciences, and more time to practical work and to art and musical appreciation. In English, oral language is emphasized rather more and grammar much less than in the academic schools.

(iv) *State Details.* Very brief particulars of the position in each of the States are given on pages 432-3 of Official Year Book No. 40.

4. **Examinations and Accrediting.**—(i) *Examinations.* The various public examinations which were formerly held at different stages of education were described in previous Year Books, in particular in No. 40 (1954). At present there is only one State, Queensland, where a public examination is held at the primary level; in all other States, school pupils sit for public examinations at the secondary level only, and the trend is towards greater use of internal examinations within each school, and headmasters' recommendations. In Queensland, pupils sit for the Scholarship Examination at the end of primary school to qualify for free secondary school tuition.

The length of the secondary course now varies from four years in Queensland to six years in Victoria, the Intermediate or Junior Examination generally being taken after two to four years' study.

There is no Intermediate Examination in Tasmania, the first public examination being the Schools' Board Certificate, at the end of the fourth year. The Leaving Certificate in most States has not been supplanted, but has been modified to provide a greater variety of subjects and, as for example in mathematics, the opportunity of choosing several specialized courses or a broad course. In four States, it remains a fully external examination in which a pass which satisfies certain requirements is accepted by the University for matriculation purposes. The School Leaving Examination in Victoria and the Schools' Board Examination in Tasmania may be taken internally by approved schools. In both these States, a further year's study is required of students who wish to sit for the University matriculation examination.

South Australia has a further year beyond the Leaving Certificate for a separate examination known as "Leaving Honours". Only the Leaving Certificate is necessary for matriculation, but good results—credits as distinct from passes—in the Leaving Honours examination may carry exemption from some subjects of the first-year university course. Separate matriculation examinations also exist in New South Wales and Western Australia but successful Leaving candidates are not required to sit.

In New South Wales, a special committee set up to review the education system has recommended that the present secondary examinations be replaced by a School Leaving Certificate examination at the end of four years, and a Higher School Certificate two years later, which will serve for university matriculation.

(ii) *Accrediting.* The system of granting certificates, or credit for subjects passed, without external examination is a major development and now operates in five States (but in two of these on a limited scale only). Credit is assessed on the student's record of work for the year, together with performance in internal examinations. Syllabuses can be less rigidly controlled and can be more freely adapted to local conditions, although standards are maintained by the supervision of the central authority. However, all States have an external examination for matriculation.

(iii) *State Details.* The details of accrediting in each State were given on pages 433-4 of Official Year Book No. 40.

5. **Health Services to Schools.**—Information relating to school medical and dental services is given in Chapter XVII.—Public Health.

6. **Guidance.**—Each Australian State now has a comprehensive system of educational guidance administered by trained and experienced educational psychologists and backed by a system of school record cards. In general, the functions of these services are:—selection and differentiation for secondary education, diagnosis and guidance of atypical children, preliminary vocational guidance and, in some States, research. The weight given to each of these functions varies considerably from State to State, but the aim is to provide thorough educational guidance for all children.

Throughout Australia, branches of the Commonwealth Employment Service co-operate with State Education Departments by giving post-school vocational guidance, using the data obtained and made available by the Education Departments during the school career of the children. In New South Wales, a similar service is also provided by the Youth Welfare Section of the Department of Labour and Industry

**7. Research.**—(i) *State Education Departments.* All State Education Departments have set up research branches which function as integral parts of head offices. In several States, the officer who directs research is also responsible for the guidance service offered by his department. The research undertaken is directed towards departmental activities and the findings are examined carefully in the determination of policy and procedures; in addition, many problems of immediate importance are handled. In the majority of States, too, the Research Branch supervises the collation of statistics and also plays an important part in curriculum revision and modification of examinations.

(ii) *Australian Council for Educational Research.* The Australian Council for Educational Research, a non-governmental body, is also engaged on educational research in a wide variety of fields, ranging from tertiary to pre-school education. It conducts surveys and inquiries, makes grants to approved educational investigators, serves as a centre for disseminating educational information, provides training for research workers, and standardizes and distributes educational and psychological tests for use in Australia. Although this council is an autonomous body, the Commonwealth and State Governments contribute some financial support to it.

**8. Atypical Children.**—Pupils who, for one reason or another, cannot progress to their best advantage in an ordinary school are catered for by special schools or classes. Among groups given special attention are the mentally backward, the gifted, the physically handicapped, the blind, deaf and dumb, the epileptic, the cerebral palsied, the partially sighted, the hard-of-hearing and the delinquent. The provision of special schools and classes has involved the appointment of departmental specialists, special training courses and close liaison with school health services. In some States, special clinics attached to hospitals, or functioning as an independent child-welfare service, handle cases of personality maladjustment and work in co-operation with the psychological services of the Education Departments.

**9. Education of Native Children in Australia.**—The Commonwealth Government is responsible for the education of full-blood native children in the Northern Territory. Each State has responsibility for the welfare and education of native children within its boundaries.

Native children are admitted to government schools in all States except in areas where separate facilities are provided. In those States where natives are more numerous, special schools are located at or near aboriginal reserves, settlements and stations. The schools are for the most part staffed by teachers from the Education Departments, and the curriculum is similar to that in ordinary government schools with a bias towards handicrafts. Numbers of native children also attend the mission schools conducted in several States by the various denominations. The standard of education in these schools is similar generally to that in the government schools.

**10. Provision for Rural Areas.**—(i) *General.* The population of Australia is so scattered that there is a problem in providing primary, and more especially secondary, education for all children. One method of meeting this problem has been the establishment of a wide network of one-teacher primary schools, staffed in the main with trained teachers. The practice of sending itinerant teachers to assist correspondence students in outlying areas has been introduced in the far north of Western Australia.

(ii) *Subsidized Schools.* Where a group of children is too small to warrant the establishment of a one-teacher school, a "subsidized school" may be opened. The Education Department pays part of the cost, and in some States appoints a teacher. Some States also administer "provisional schools", which are completely financed by the Government but which are not large enough, or sufficiently assured of adequate continued attendance of pupils, to warrant classification as permanent schools.

(iii) *Consolidated Schools.* In some States, in districts where a number of small centres are scattered around a larger centre or country town, recent policy has been to close the one-teacher schools and transport pupils each day by bus to a "consolidated" school in the larger centre. Consolidated schools provide primary instruction and from two to four years of post-primary instruction. The post-primary curriculum adopted usually has a bias towards practical activities and training in subjects bearing on the primary industries of the locality.

(iv) *Special Assistance.* Another way of bringing children to the school has been the provision of financial assistance for children who have to live away from home in order to attend school. Most of these board in private homes but there are a few government hostels in several States, and over 60 private hostels (excluding private boarding schools), many of which are government-subsidized. Together, these cater for almost 2,000 children of secondary school age and a small number of primary school children also. In all States, some provision is made for financial assistance towards the living and travelling expenses of children who are obliged to live away from home in order to attend school.

(v) *Correspondence.* For children who are still unable to attend school, systems of correspondence tuition have been established in every State. The Education Departments provide tuition through primary and secondary school levels and up to matriculation standard if required. In addition, the Technical Correspondence Schools conducted by the senior technical college of each State arrange for correspondence tuition at secondary level up to matriculation standard for students over the school leaving age. Further reference to the work of the Technical Correspondence Schools is made in § 5 of this chapter, which deals with technical education (*see p. 583*).

**11. School Broadcasting in Australia.**—Over the years, an extensive school broadcasting system has been developed in Australia by the co-operative efforts of the Australian Broadcasting Commission and education authorities. The Youth Education Department of the A.B.C. is responsible for the broadcasting of the programmes, but it draws freely on the advice and services of teachers and maintains permanent liaison officers with the Education Departments. More than two-thirds of Australian schools are equipped with radio receivers.

School broadcasts are presented as part of the regular A.B.C. programmes without separate stations or wave lengths. Special efforts are made, however, to relate the broadcasts to school work by the extensive distribution of booklets giving details of programmes in advance and subject notes accompanied by picture sheets, work books, and teachers' notes.

Broadcasting has proved to be a most effective way of reaching the outback children of Australia, and radio lessons have been designed to supplement correspondence lessons. The success of the first School of the Air, which has been in operation at Alice Springs in the Northern Territory since 1950 and serves correspondence pupils of the South Australian Education Department, has led to the opening of similar schools based at Ceduna and Port Augusta in South Australia, and at Broken Hill, in the far west of New South Wales. In all, these schools serve a total of well over half a million square miles. By means of special two-way radio equipment, children hundreds of miles apart can participate in the same lesson and teachers and pupils can talk directly with each other.

The "Kindergarten of the Air" is described in § 4 of this chapter, which deals with pre-school education (*see p. 582*).

**12. Teacher Training and Recruitment.**—(i) *General.* The training of government school teachers is carried out by the State Education Departments, but in most States persons who wish to train for teaching in private schools may attend government training colleges on payment of a fee. Many non-government school teachers have been drawn from the government teaching services and others have been recruited at the university graduate level. Private training institutions also provide some teachers.

An account of the early growth of teacher training systems is to be found in Official Year Book No. 22 and subsequent developments were reviewed extensively in Official Year Book No. 40. The pupil-teacher system has been abandoned as the chief method of training teachers and teacher students are now recruited at matriculation level and given a professional course of training at colleges controlled by Education Departments or by university departments of education. The raising of standards and lengthening of training have led to a close association between the Education Departments and universities. The trend has been towards placing teacher training on the same basis as other professional training.

There is at present a shortage of teachers in Australia. Measures taken to overcome this shortage include substantial increases in teachers' salaries and liberalization of promotion systems, publicity drives to attract recruits and increases in living allowances to departmental teachers' college students. In some States, special arrangements are in force for intensive shorter training courses, in order to meet the immediate need. In others, recruitment of teachers overseas is undertaken to reduce the shortage.

(ii) *Training Colleges.* Every State maintains at least one teachers' training college. Most students are trained at colleges in the capital cities, although there has been a movement towards the establishment of colleges in the country. At the end of 1958, there were in Australia 23 teachers' colleges conducted by Education Departments and professional training for graduate teachers was provided by seven universities.

(iii) *Training of Primary Teachers.* In most States, teachers for government primary schools are trained in co-educational teachers' training colleges controlled and administered by the State Education Departments. Departmental trainees are given a monetary allowance while in training and are required to enter into a bond to serve for a specified period on completion of training or to repay all or portion of the cost of training.

The entrance standard is generally at the Leaving Certificate level at about the age of seventeen. In some States, intending teachers can obtain a scholarship at the Intermediate Certificate level to enable them to complete teachers' college entrance requirements. In return, they are required to enter into a bond of service additional to that normally required of departmental teachers' college trainees.

In general, the duration of courses is two years for primary teachers, including infants' teachers. The basic subjects taken in the various courses are principles, history and general methods of teaching, special methods of teaching primary school subjects and educational psychology. In addition, students undertake courses in physical education, art, music, school hygiene and handicrafts as well as lectures designed to widen their own cultural background.

In South Australia, primary teacher trainees attend certain university courses, including Education, as part of their training. In Tasmania, while the majority of departmental teacher trainees receive their training at the university, there is also a government teachers' college providing courses in infant, primary and home arts teaching.

In some States, separate courses are provided for infants' teachers and for teachers in small one-teacher schools. In Victoria, an extension course of one year following the primary course is designed to train teachers of home-crafts for primary schools.

(iv) *Training of Secondary Teachers.* Prospective secondary teachers are required to undertake a degree course followed by a one-year post-graduate course leading to a university degree or diploma in education, or a two or three year course at a teachers' college. Both these periods of training include lectures on subjects associated with educational theory and practice, study of methods and techniques appropriate to secondary school subjects, periods of practice teaching and the observation of classroom techniques in the teaching of special subjects.

(v) *Training of Specialist Teachers.* Teachers of specialist subjects such as music, art, manual arts, domestic science and commercial subjects receive from two to five years' training varying according to the institution concerned and the type of secondary school in which the teacher is to teach. In several States, the shorter courses are provided wholly by the teachers' colleges. Where the specialist course is given at an institution other than the teachers' college—for example, at a university, technical college or conservatorium of music—as is usual for teachers of specialist subjects in high schools, trainees are required to attend teachers' college or university lectures in education and in some cases the specialist course is followed by a year of professional training.

There are conservatoria of music in four States. In New South Wales and Queensland, the conservatorium is a State institution under the Minister for Education; in Victoria and South Australia, it is attached to the university.

Courses designed to train physical education teachers are offered in five States, in one at a teachers' college and in the others by the universities.

Training for teachers of agricultural subjects in secondary schools is available in five States and consists of either an agricultural college diploma or a university degree course together with professional training. In Victoria, the two-year agricultural college diploma course follows the normal two-year primary teachers' course. In New South Wales, in addition to the three-year university agricultural course followed by one year's professional training, there is a two-year teachers' college agricultural course.

(vi) *Training of Technical Teachers.* Teachers of general subjects in technical schools and colleges usually receive their training either as primary or as secondary teachers and after some experience in either or both fields are transferred to a technical institution.

Teachers of specialist subjects in technical schools are usually recruited from the ranks of qualified tradesmen engaged in either industry or commerce. Upon appointment, teachers of technical subjects usually receive instruction in classroom teaching techniques and procedures. A separate Technical Teachers' College has been established in Victoria.

(vii) *In-service Training.* As almost all teachers now enter the profession by way of teachers' colleges, where they receive basic professional training, in-service training in Australia is directed chiefly towards keeping teachers abreast of developments and adding to their basic training.

Such training usually takes the form of short courses held sometimes during vacations, sometimes during school-time or in the evenings. Courses consist of discussions and lectures given by senior staff members of Education Departments and university and teachers' college lecturers, on such subjects as classroom techniques and supervision, librarianship, visual aids, music, arts and crafts and physical education. In some States, there are also in-service courses for special groups of teachers, such as headmasters or teachers of one-teacher schools. In addition, district inspectors are responsible for organizing short conferences of teachers where professional topics are discussed.

Education Departments encourage teachers to pursue university courses, and in some States pay the cost of courses undertaken by selected teachers.

The official publications of the Education Departments contain articles dealing with educational theory and practice. In most States, the magazines of the teachers' organizations, which reach the majority of government teachers, also contain articles of this type.

(viii) *State Details.* The details of teacher training in the States are given on pages 442-3 of Official Year Book No. 40.

(ix) *Sex and Status of Teachers.* Although about one half of the teachers in State schools in Australia are men, the ratio varies from State to State. In the infants' schools and generally in girls' departments, women teachers only are employed. Men, however, predominate in the senior positions, both because of their greater preponderance amongst those with long service and because the higher promotion positions are generally reserved for men, except in infants' schools and girls' schools.

13. *School Buildings and Grounds.*—In 1930, school building programmes were seriously cut because of the financial difficulties of the depression. The 1939-45 War intervened before school building could be resumed on a large scale. After the war, the building of schools was given a high priority, but the rapid post-war increases in school population have imposed a severe strain on available school accommodation and such emergency measures as the use of halls, cloakrooms and weather-sheds for class instruction have been adopted in some areas.

The post-war buildings fall into two groups, portable and permanent. In primary schools in particular, some Education Departments favour the use of both kinds of classroom in conjunction, thus enabling them to cope with the changing age-composition of particular areas. Prefabricated buildings and classrooms have been imported or locally produced in increasing quantities and include both timber-frame, aluminium and steel units, and single and multiple pre-cast concrete units. Such prefabricated buildings are used not only in extending the facilities of existing schools and to provide multi-purpose units such as assembly hall gymnasiums but also, now, for erecting entire schools. Expenditure on school building has increased greatly in all States over recent years.

14. *Equipment.*—(i) *Text Books and Materials.* The State Education Departments supply government schools with essential equipment free of charge, including scientific apparatus and equipment, maps, blackboards, chalk and cleaning materials, and non-consumable equipment for commercial, home science and manual training. Garden tools and physical training equipment are supplied free in most States.

Primers and writing equipment for individual pupils are usually supplied free in primary schools, and each Department, except that in Tasmania, produces in addition monthly school magazines which are supplied free or at a small cost. Textbooks, however, are supplied to primary pupils free of charge in one State only. In other primary schools and in all secondary schools, textbooks must be purchased by students, although in several States schools own stocks of textbooks which are hired to students, and in one State secondary textbooks are sold at reduced rates.

Other equipment is supplied free by the Departments on a limited basis only. Equipment such as radios, film and filmstrip projectors, pianos, duplicators and library books are ordinarily purchased for individual schools by the parent and citizens organizations associated with them, with the assistance of subsidies from the Departments.

(ii) *Furniture.* There has been considerable development in this field. Originally most schools were equipped with long desks and benches, seating six to eight pupils, but these were later replaced by the standard dual desk with tip-up seat, and in infant classes by individual chairs and small tables. After the war, considerable research was undertaken on posture and the physical measurement of children. The dual desk is now being replaced in some States by the individual table and chair, provided in a range of sizes suitable to each class. In some States, tubular steel is used. The new type of furniture is more suitable for flexible arrangements of the class in line with modern educational practice.

(iii) *Visual Aids.* In the past 20 years, there has been a remarkable growth in the use of visual aids in education. After some resourceful pioneering work had been done by individuals, the Departments of Education, between 1936 and 1939, appointed special committees and teacher demonstrators to guide the development of the new educational medium. Production units to produce film strips suitable for use in schools were set up in five States and an Australian-produced film-strip projector was manufactured. After the war, the emphasis moved from the strip projector to the 16 mm. sound machine and the Australian National Film Board, set up by the Commonwealth Government to promote

the use of educational films, became the main producer of these films. Film companies are also designing films primarily for class-room use and several manufacturers have produced 16 mm. sound projectors. Education Departments have their own film libraries to distribute films to schools and, in addition, borrow from the Commonwealth National Library, which is the main distributing centre for non-technical films in Australia.

**15. Parent and Citizen Organizations.**—In Australia, where all government schools are administered by central departments, there is little opportunity for local administration of education. Public interest is expressed through parents' committees or organizations of parents and other citizens interested in supporting their local school. The Education Acts of all States provide for the formation of groups of this type, whose aims are to promote the interest of the school by bringing parents, pupils and teaching staff together, to help provide teaching aids and recreation materials not supplied by the departments, to assist in the regular attendance of children at school and to help find accommodation for teachers.

In several States, the general maintenance of school buildings, equipment and grounds is a statutory responsibility of the parent groups, costs being covered by government grants. Lunch canteen services at local schools, where Oslo lunches may be purchased, are maintained by groups in some States.

A notable achievement of the parent groups has been the establishment of school children's insurance schemes, operated through State government insurance offices or private insurance companies. These schemes cover accidents to children which occur between the time of leaving home for school and returning home by the usual direct route.

State-wide councils of federations of parents' groups are associated in a federal body, the Australian Council of School Organizations.

**16. School Banking.**—Particulars of School Savings Banks are included in Chapter XX.—Private Finance.

**17. Statistics of Government Schools.**—(i) *General.* The government schools shown in the following tables include primary, secondary, junior technical, correspondence and subsidized schools, but exclude senior technical colleges, evening schools and continuation classes.

Particulars relating to senior technical colleges are given in § 5, page 583.

Enrolments may be measured in a number of ways:—

*Gross Enrolment* means the number of names entered on the school rolls during the course of a year. Some children are thus counted more than once if they transfer from school to school during the year.

*Net Enrolment* means the gross enrolment less transfers from school to school. This is sometimes referred to as "the number of children instructed" at any time during the year. Children transferring from Government to non-Government schools will still be counted in both places. Net enrolment is less than gross enrolment, but greater than the number of children enrolled at one time.

*Average Weekly enrolment may mean either* (1) the average of the highest enrolment in each week; or (2) the average of the average enrolments for all weeks in the year. These figures do not differ appreciably, but some States use one, and some the other.

*Average Weekly Enrolment*, by either method, may include a few children counted twice. It may be less than net enrolment and less than the greatest number of children enrolled at one time.

*Census Enrolment* means the number of children enrolled on a chosen day, usually 1st August. The figures thus determined usually approximate to the average weekly enrolment. If the census is at the end of the year, the figure may be higher than average weekly enrolment for primary schools and lower for secondary schools.

*Average Daily Attendance* which means the average number of children present for each whole schoolday. In some States, half-day absences are taken into account in computing "average daily attendance" thus lowering the figure which would be obtained if presence for half a day were counted as presence for a whole day.

(ii) *Statistical Summary.* The following table shows for 1957 the number of government schools, together with the teachers employed, teachers in training and the number of children enrolled.

GOVERNMENT SCHOOLS(a), 1957.

State or Territory.	Schools Open at End of Year.	Teachers Employed (excluding Teachers in Training).	Teachers in Training.	Net Enrolment.
New South Wales(b) .. .. .	2,639	17,486	3,946	539,781
Victoria .. .. .	2,073	12,728	3,510 (c)	355,220
Queensland .. .. .	1,559	7,637	2,085	214,626
South Australia .. .. .	653	5,109	859	147,866
Western Australia .. .. .	499	3,796	965	104,105
Tasmania .. .. .	278	2,279	494	60,814
Northern Territory .. .. .	10	89	..	2,610
<b>Australia .. .. .</b>	<b>7,711</b>	<b>49,124</b>	<b>11,859</b>	<b>1,425,022</b>

(a) Excludes Senior Technical Colleges. (b) Includes Australian Capital Territory. (c) Estimated.

(iii) *Average Enrolment and Attendance.* The average enrolment and attendance in each State and the Northern Territory during 1957 are shown below:—

GOVERNMENT SCHOOLS(a): AVERAGE ENROLMENT AND ATTENDANCE, 1957.

State or Territory.	Average Weekly Enrolment.	Average Daily Attendance.	Percentage of Attendance to Enrolment.
New South Wales(b) .. .. .	532,813	478,717	89.85
Victoria .. .. .	355,220	320,774	90.30
Queensland .. .. .	(c) 214,301	189,528	88.44
South Australia .. .. .	(d) 141,415	129,613	91.65
Western Australia .. .. .	105,726	99,031	93.67
Tasmania .. .. .	57,405	52,397	91.28
Northern Territory .. .. .	(d) 2,359	2,093	88.72
<b>Australia .. .. .</b>	<b>1,409,239</b>	<b>1,272,153</b>	<b>90.27</b>

(a) Excludes Senior Technical Colleges. (b) Includes Australian Capital Territory. (c) Census enrolment at 1st August. (d) Average daily enrolment.

The average attendance at government schools in Australia is shown in the following table for the year 1891 and at varying intervals to 1956.

GOVERNMENT SCHOOLS(a): AVERAGE ATTENDANCE, AUSTRALIA.

Year.	Total Population. (b)	Average Daily Attendance.	Year.	Total Population. (b)	Average Daily Attendance.
	'000.	No.		'000.	No.
1891 .. .. .	3,421	350,773	1952 .. .. .	8,740	974,934
1901 .. .. .	3,825	450,246	1953 .. .. .	8,903	1,037,621
1911 .. .. .	4,574	463,799	1954 .. .. .	9,090	1,089,484
1921 .. .. .	5,511	666,498	1955 .. .. .	9,313	1,153,628
1931 .. .. .	6,553	817,262	1956 .. .. .	9,533	1,219,081
1941 .. .. .	7,144	732,116	1957 .. .. .	9,747	1,272,153
1951 .. .. .	8,528	899,514			

(a) Excludes Senior Technical Colleges. (b) At 31st December.

(iv) *Schools in the Australian Capital Territory.* During 1957, 14 government schools were in operation in the Australian Capital Territory. Enrolment numbered 5,882, and average attendance was 5,364. By arrangement with the Commonwealth Government, these schools are conducted by the New South Wales Education Department with a provision for primary and secondary education, the Department being recouped for expenditure. The cost of the teaching staff in 1956-57 was £278,376, while the cost of general maintenance amounted to £138,895. The figures quoted exclude enrolment, etc., at the Canberra Technical College and the Evening Continuation School. For further particulars of educational facilities in the Australian Capital Territory, see Chapter V.—The Territories of Australia, Australian Capital Territory, page 121.

(v) *Expenditure. (a) Maintenance—All Schools (except Senior Technical Colleges).* The net expenditure on maintenance in all grades of schools, except senior technical colleges and, in Victoria, junior technical schools, and the cost per head of average attendance for each of the years 1953 to 1957 are shown in the following table. The figures do not include expenditure on buildings, which is shown in a subsequent table. In all expenditure tables, the figures for Victoria, Queensland, Western Australia and the Northern Territory relate to the financial year ended six months earlier than the calendar year.

**GOVERNMENT SCHOOLS(a) : NET EXPENDITURE ON MAINTENANCE.**

Year.	N.S.W. (b)	Vic. (c)(d)	Q'land. (d)	S. Aust.	W. Aust. (d)	Tas.	N.T. (d)	A.C.T.	Aust.
<b>TOTAL (INCLUDING SECONDARY SCHOOLS).</b> (£'000.)									
1953..	19,717	11,931	5,630	4,107	3,898	2,211	88	202	47,784
1954..	21,486	12,993	6,353	4,444	4,382	2,435	102	258	52,453
1955..	24,901	14,454	6,979	5,480	5,143	2,667	125	309	60,058
1956..	27,054	17,405	8,194	5,986	5,755	de 2,896	149	345	67,784
1957..	28,859	19,439	9,098	6,581	6,307	(d) 3,386	155	417	74,242
<b>PER HEAD OF AVERAGE ATTENDANCE.</b> (£ s. d.)									
1953..	49 9 6	46 5 7	36 2 0	40 15 5	51 5 4	50 7 8	57 4 5	64 2 3	46 1 0
1954..	52 1 11	47 13 6	39 5 2	41 3 11	53 0 0	51 12 6	67 0 8	75 7 3	48 2 11
1955..	57 4 9	49 19 2	40 15 8	47 7 8	58 12 11	54 7 5	79 4 1	74 14 3	52 1 3
1956..	59 13 10	56 14 6	44 18 3	48 6 9	60 17 8	55 18 10	81 3 11	74 0 2	55 12 1
1957..	60 19 4	60 12 0	48 0 1	50 15 6	63 13 9	64 12 6	74 1 1	77 14 10	58 7 2

(a) Excludes Senior Technical Colleges. (b) Gross figures, receipts not being available.  
(c) Excludes Junior Technical Schools. (d) Twelve months ended 30th June of year shown.  
(e) Estimated.

(b) *Maintenance—Secondary Schools.* The figures shown in the preceding table refer to expenditure on the maintenance of all government primary and secondary schools, excluding senior technical colleges. It has been the practice of the State Education Departments to give separate information in regard to the cost of secondary education. The fact, however, that both elementary and higher education are in some instances given in the same school and by the same teacher makes difficult any satisfactory allocation of expenditure between primary and secondary education. Furthermore, the term "secondary" has not the same meaning in all States. Similar difficulties arise in connexion with the apportionment amongst the various branches of expenditure on administration, inspection and the training of teachers. The figures quoted hereunder in respect of cost have been extracted mainly from the reports of the State Education Departments, and are subject to the foregoing qualifications. There are no secondary schools in the Northern Territory, although some primary schools have secondary tops. Consequently no figures are given in the following table for the Northern Territory.

**GOVERNMENT SECONDARY SCHOOLS(a) : EXPENDITURE ON MAINTENANCE.**

State.	1955.		1956.		1957.	
	Cost.	Cost per Head of Population.	Cost.	Cost per Head of Population.	Cost.	Cost per Head of Population.
	£	£ s. d.	£	£ s. d.	£	£ s. d.
New South Wales(b)	7,660,115	2 3 6	7,217,534	2 0 2	8,023,854	2 4 9
Victoria ..	3,881,621	1 11 2	4,763,622	1 16 7	5,557,264	2 2 1
Queensland ..	842,976	0 12 9	1,027,837	0 15 2	1,154,012	0 16 9
South Australia ..	1,316,448	1 12 1	1,487,692	1 15 1	1,685,933	1 19 2
Western Australia ..	1,340,213	2 1 4	1,444,205	2 3 2	1,657,735	2 8 5
Tasmania(c)	472,973	1 10 1	(d)	(d)	654,388	2 0 2
<b>Australia ..</b>	<b>15,514,346</b>	<b>1 13 9</b>	<b>(d)</b>	<b>(d)</b>	<b>18,733,186</b>	<b>1 19 4</b>

(a) Excludes Senior Technical Colleges. (b) Includes A.C.T. (c) Includes High and Junior Technical Schools. (d) Not available.

The figures in all cases exclude the cost of buildings. In Queensland, the figure quoted excludes the cost of the Agricultural High School and College, which amounted in 1954-55 to £221,181, in 1955-56 to £246,973 and in 1956-57 to £261,254.

(c) *Buildings.* Expenditure on government school buildings, excluding senior technical colleges, for the years 1953 to 1957 was as follows:—

**GOVERNMENT SCHOOLS(a) : EXPENDITURE ON BUILDINGS.**  
(Including Loan Fund Expenditure.)  
(£'000.)

Year.	N.S.W.	Vic.(b)	Q'land.(b)	S. Aust.	W. Aust. (b)	Tas.	N.T.(b)	Total.
1953 ..	4,170	3,099	645	897	2,007	668	117	11,603
1954 ..	5,494	4,061	812	1,146	1,038	1,349	60	13,960
1955 ..	7,366	4,660	1,287	1,366	1,458	1,340	16	17,493
1956 ..	7,409	5,917	1,589	1,518	1,591	b c 1,200	25	19,249
1957 ..	7,707	6,266	1,608	1,992	1,827	(b) 1,078	106	20,584

(a) Excludes Senior Technical Colleges. (b) Year ended 30th June. (c) Estimated.

The totals for the various States in 1957 include the following amounts expended from funds other than the consolidated revenue fund:—New South Wales, £5,358,576; Victoria, £5,993,856; Queensland, £1,266,360; South Australia, £1,686,142; Western Australia, £1,551,650; and Tasmania, £1,048,061.

(d) *Total Net Cost.* The total net cost of education in government schools, including buildings, during the years 1953 to 1957 was as follows:—

**GOVERNMENT SCHOOLS(a) : TOTAL NET COST.**  
(£'000.)

Year.	N.S.W. (b)(c)	Vic. (d)(e)	Q'land. (d)	S. Aust. (c)	W. Aust. (d)	Tas.	N.T. (d)	A.C.T. (c) (f)	Aust- ralia.
1953 ..	23,887	15,030	6,276	5,004	5,905	(c) 2,879	205	202	59,388
1954 ..	26,980	17,055	7,165	5,590	5,420	(c) 3,784	162	258	66,414
1955 ..	32,268	19,114	8,265	6,847	6,601	(c) 4,007	141	309	77,552
1956 ..	34,464	23,322	9,784	7,504	7,343	(d) 4,046	174	345	86,982
1957 ..	36,566	25,705	10,706	8,573	8,134	(d) 4,464	261	417	94,826

(a) Excludes Senior Technical Colleges. (b) Gross expenditure, receipts not being available.  
(c) Figures relate to 12 months ended 31st December of year shown. (d) Figures relate to 12 months ended 30th June of year shown. (e) Excludes Junior Technical Schools. (f) Excludes expenditure on buildings.

The figures in this and the preceding tables refer to all grades of government schools with the exception of senior technical colleges, and in Victoria, junior technical schools.

### § 3. Non-Government Schools.

1. *Public Authority and the Non-Government Schools.*—In all States, education is compulsory for all children between certain ages. It must be received in a government school, unless the child is under "regular and efficient" instruction elsewhere. This may be at home, or in a non-government school. The provision for control over the regularity and efficiency of instruction in the non-government schools varies considerably from State to State. In New South Wales and Western Australia, provision is made for an initial inspection when a new school starts, and for inspections thereafter as the Minister requires, to ensure efficiency. In Victoria and Tasmania, registers are kept of teachers and schools, and both teachers and schools must satisfy the administering authority that they are efficient before registration is granted. Without such registration, neither a teacher nor a school can operate. Provision is made, too, for inspections at any time by the registering authority.

In Queensland, eight grammar schools, which exist by statutory authority and are subsidized by the State, are subject to annual inspection. These are the only non-government schools in Australia for which an annual inspection is prescribed by statute. Other non-government schools in Queensland may be inspected at their own request, but it is possible for these schools—and also those in South Australia—to exist without inspection.

Public authority over schools or institutions having scholars above the compulsory ages is generally less direct. It is effected directly by the registration procedures in Victoria

and Tasmania, and in all States there is a measure of indirect control through provisions governing the award of State scholarships, bursaries or other forms of financial assistance to secondary scholars, which are available only in government or approved non-government schools. In New South Wales, also, the Intermediate and Leaving Certificates are awarded only to pupils of schools whose courses of study are approved by the Department of Education.

In all States, non-government schools are required, under the authority of either the Education Acts or Statistics Acts, to furnish certain statistical returns. The form of these returns may be prescribed in the Acts or may be subject to alteration with the Minister's consent.

2. **Non-Government Schools Finance.**—Roman Catholic parochial schools do not charge fees, although most families make a contribution if they can afford to do so. With this exception, pupils of non-government schools must ordinarily pay fees. At the majority of non-government secondary schools, privately endowed scholarships are available in varying numbers and reductions in fees are normally made for children of clergy or for two or more members of one family attending the same school.

Certain State scholarships and bursaries are, as noted above, tenable at approved non-government secondary schools. Since the establishment of educational systems by the State Governments, official policy has been largely against the provision of direct financial assistance to non-government schools. Eight undenominational grammar schools in Queensland, however, receive a State subsidy under the Grammar Schools Acts 1860–1900. In 1957, the Tasmanian State Government brought down legislation, which was subsequently rejected by the Legislative Council, for the provision of capital grants to non-government schools, and in 1956, the Commonwealth Government arranged to contribute to the interest payments on loans raised by churches in order to build denominational secondary schools in the Australian Capital Territory.

3. **Numbers of Non-Government Schools, Teachers and Enrolments.**—The numbers of non-government schools, teachers and enrolments for 1957 are shown in the following table:—

**NON-GOVERNMENT SCHOOLS, 1957.**

Denomination.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Aust.
<b>NUMBER OF SCHOOLS.</b>								
Denominational—								
Church of England ..	41	34	16	13	8	4	..	116
Methodist ..	6	4	(b) 5	3	3	1	..	22
Presbyterian ..	12	15	3	2	2	1	..	35
Roman Catholic ..	668	413	256	117	168	36	2	1,660
Other ..	20	24	6	20	5	4	..	79
Undenominational ..	41	42	10	6	105	6	..	210
<b>Total .. ..</b>	<b>788</b>	<b>532</b>	<b>296</b>	<b>161</b>	<b>291</b>	<b>52</b>	<b>2</b>	<b>2,122</b>
<b>TEACHERS.</b>								
Denominational—								
Church of England ..	822	690	279	218	112	102	..	2,223
Methodist ..	174	171	119	86	52	25	..	627
Presbyterian ..	293	349	49	73	50	10	..	824
Roman Catholic ..	4,765	2,340	1,644	701	690	228	14	10,382
Other ..	73	179	28	103	19	51	..	453
Undenominational ..	415	318	116	83	211	38	..	1,181
<b>Total .. ..</b>	<b>6,542</b>	<b>4,047</b>	<b>2,235</b>	<b>1,264</b>	<b>1,134</b>	<b>454</b>	<b>14</b>	<b>15,690</b>
<b>AVERAGE WEEKLY ENROLMENT.</b>								
Denominational—		(c)	(c)	(c)			(c)	
Church of England ..	11,157	12,932	4,244	3,931	2,257	1,648	..	36,169
Methodist ..	2,593	3,587	1,898	1,383	1,088	317	..	10,866
Presbyterian ..	4,557	6,713	661	1,246	1,082	205	..	14,464
Roman Catholic ..	147,702	109,286	53,589	20,440	24,931	7,433	580	363,961
Other ..	1,122	3,435	508	1,691	311	907	..	7,974
Undenominational ..	5,589	5,933	2,610	1,233	3,881	539	..	19,785
<b>Total .. ..</b>	<b>172,720</b>	<b>141,886</b>	<b>63,510</b>	<b>29,924</b>	<b>33,550</b>	<b>11,049</b>	<b>580</b>	<b>453,219</b>

(a) Includes Australian Capital Territory.

(b) Presbyterian and Methodist Schools' Association.

(c) Net enrolment.

4. Growth of Non-Government Schools.—The enrolment and average attendance at non-government schools in 1891 and at varying intervals to 1957 were as follows :—

NON-GOVERNMENT SCHOOLS : ENROLMENT AND ATTENDANCE.

Year.	Average Weekly Enrolment. (a)	Average Daily Attendance.	Year.	Average Weekly Enrolment. (a)	Average Daily Attendance.
1891 .. ..	124,485	99,588	1951 .. ..	326,258	293,429
1901 .. ..	148,659	120,742	1953 .. ..	366,086	337,156
1911 .. ..	160,794	132,588	1954 .. ..	388,312	352,736
1921 .. ..	198,688	164,075	1955 .. ..	409,945	377,908
1931 .. ..	221,387	189,665	1956 .. ..	432,985	(b)401,900
1941 .. ..	256,580	224,355	1957 .. ..	453,219	(b)422,000

(a) See Note (c) to previous table.

(b) Partly estimated.

5. The Organization of Roman Catholic Education.—There is, in each State capital, an official who acts under the Archbishop as a Director of Catholic Education for the area. Each diocese within the area is, however, autonomous and manages its own educational affairs subject to the local episcopal authority. The State Director has, in addition to possible inspectorial functions within his own diocese, the duty of co-ordination of educational matters within his area, and of liaison with other educational authorities, particularly the State Education Department.

The system includes kindergartens, sub-primary, primary, academic secondary, home science, commercial, agricultural and technical schools, juniorates and minor seminaries, schools for the mentally and physically handicapped, orphanages and a variety of special schools of a charitable nature for under-privileged or socially handicapped children.

With the exception of a small number of permanent lay teachers and a number of visiting teachers, usually specialists in such matters as physical education, sport, and speech, teaching is done by members of religious orders.

6. The Organization of Other Non-Government Education.—(i) *General.* Practically all non-government schools, except a limited number under private ownership, are governed by a controlling body known variously as a School Council or Board of Trustees or Governors.

Within each State, although the other non-government schools may be organized into loose forms of association for purposes such as sports, conferences, and uniform conditions, there is no system corresponding in size, detail or organization with the Roman Catholic schools.

The Headmasters' Conference of Australia and the Headmistresses' Association of Australia are composed of headmasters and headmistresses respectively of a number of the larger non-government schools, including some Roman Catholic schools. Neither body has executive powers. One of the chief considerations for the admission of new members is the degree of independence enjoyed by the governing body and principal of the school concerned.

(ii) *Church of England.* The various types of Church of England schools include small schools associated with a local parish; schools under direct ownership of a diocese; schools established by Acts of the Church Synod, in which the majority of the members of the council are church representatives but which, otherwise, have almost complete independence; and schools conducted by religious orders of the church.

The proportion of members of a school council nominated by the church varies. In some schools, members may also be nominated by parents, by former students, and by the council itself.

In general, schools incorporating the words " Church of England " in their title follow a diocesan syllabus of religious education.

(iii) *Other Denominations.* In general, control of Presbyterian schools is exercised through School Councils appointed by the General Assembly of the Presbyterian Church in the State concerned. Councils vary considerably in size and in the bodies represented on them. Similarly, appointments to councils of Methodist schools are made by the annual Conference of each State.

In Queensland, five schools are operated under the joint auspices of the Presbyterian and Methodist churches. A limited number of schools are conducted by other denominations, such as the Baptist, Congregational and Lutheran churches and by the Seventh-Day Adventists. The Society of Friends conducts one school in Australia, the Friends' School, Hobart.

Jewish schools are conducted in several capital cities.

(iv) *Undenominational.* There are a number of undenominational schools in Australia. Some of the larger, although not State-operated, have Government nominees on their boards. They include Sydney Grammar School, the Hale School, Perth, and the eight Queensland

grammar schools. Other undenominational schools operate under the auspices of corporate bodies, usually in the form of a limited liability company, while others are privately owned. The majority of schools in this last category are small kindergartens and primary schools.

#### § 4. Pre-School Education.

1. **Types of Pre-School Centres.**—Free kindergartens were originally established in congested industrial areas and financed mainly by voluntary effort, but over the years the Commonwealth Government, the State Governments and some municipal councils have provided an increasing amount of financial assistance, and in addition themselves maintain pre-school centres in certain areas.

In 1938, the six Kindergarten Unions, the voluntary organizations which pioneered pre-school education in Australia, met to form a federal organization. Its title "Australian Association for Pre-school Child Development" was changed in 1954 to "Australian Pre-school Association". Its membership is now open to all organizations whose main objective is the care of the pre-school child, and includes bodies in the Australian Capital Territory, the Northern Territory, and the Territory of Papua and New Guinea.

The aim of the association is to promote the continuous advancement of pre-school movements throughout Australia. It sets out standards which act as a guide throughout Australia to those sponsoring pre-school centres, and is responsible for the administration of the six Lady Gowrie Child Centres. These centres are demonstration nursery schools which the Commonwealth Government established in each of the capital cities in 1940 and which are maintained by Commonwealth grants.

To-day, pre-school centres are found not only in inner city areas but also in suburban and country districts. Programmes are adapted to suit the areas in which the centres are situated. Types of pre-school centres include nursery kindergartens, crèches with full-day care for children of working mothers, play groups and play centres, occasional care centres and residential holiday homes. Crèches accept children from a few weeks of age up to 5 or 6 years while other centres cater for children from about 3 years up to 5 or 6 years. A mobile unit is in operation in the Australian Capital Territory.

2. **The Training of Teachers.**—It is an accepted principle in Australia that all types of pre-school work should be under the guidance of trained pre-school teachers, although, owing to the shortage of teachers, this cannot always be put into practice.

The Kindergarten Unions in all States except Tasmania have established teacher training colleges providing three year courses. The minimum entrance age is seventeen and the Leaving Certificate is usually required before admission. In addition, in New South Wales, the Sydney Day Nursery and Nursery Schools' Association maintains a training college, and a two-year course for nursery teachers is available at the Sydney Teachers' College.

In Tasmania, prospective teachers complete a two-year course of training at one of the Education Department's pre-school centres. Those wishing to gain a Kindergarten Training College diploma must attend a college on the mainland.

Many students-in-training receive government scholarships, and others are sponsored by government departments or voluntary organizations.

3. **Kindergarten of the Air.**—The Kindergarten of the Air came into being in 1942 in Western Australia, where, under the stress of the war, kindergartens could not remain open. It was conducted by the Australian Broadcasting Commission and proved so successful that within a few years it was being broadcast throughout Australia and has inspired similar projects overseas. It consists of a daily programme of 25 minutes based on the interests of children from 3 to 5 years of age.

4. **Kindergarten Unions.**—The following information regarding kindergarten unions has been compiled from particulars supplied by the principals of the chief institutions or the organizing secretary in each State, except in the case of Western Australia where the details were furnished by the Education Department. It refers to kindergarten unions or associations and excludes the kindergarten branches in the government schools of the various States.

KINDERGARTEN UNIONS, 1957.

State.	No. of Schools.	Average Attendance.	Permanent Instructors.	Student Teachers.
New South Wales .. .. .	38	1,463	102	30
Victoria .. .. .	49	1,451	75	(a)
Queensland .. .. .	22	(a)	38	..
South Australia(b) .. .. .	93	3,112	286	..
Western Australia .. .. .	44	1,567	84	..
<b>Total(c)</b> .. .. .	<b>246</b>	<b>7,593</b>	<b>585</b>	<b>(a)</b>

(a) Not available. (b) Includes affiliated suburban and country centres. (c) In 1956, all Kindergartens formerly under the jurisdiction of the Tasmanian Kindergarten Union came under the control of the Department of Education.

In 1957, only 69 of these 246 kindergartens were located outside metropolitan areas, mainly in the larger provincial cities. In each capital city, except Hobart, there is a training college and the number of students in training during 1957 was 85 in Sydney, 141 in Melbourne, 35 in Brisbane, 38 in Adelaide, and 24 in Perth.

### § 5. Technical Education.

1. General.—In this section, technical education refers to that branch of education which is concerned with the preparation for entry to skilled occupations, including trades and professions. In the main, this education is vocational and is chiefly part-time, being carried out by the student while he is engaged in his occupation. The work of technical high schools, junior technical schools and other schools of this nature, which provide courses with a bias towards technical handwork, has been excluded, as these schools provide a form of education which is more properly regarded as secondary education.

The chief institutions for higher education other than the universities are the technical colleges, which are administered in five States by a division of the Education Department. In New South Wales, a separate Department of Technical Education has been established, and in Victoria a number of the foremost technical colleges are controlled by independent councils which, although responsible to the Minister of Education, enjoy a large measure of autonomy.

The technical colleges offer training not only in all the major industrial skills, but also in a variety of commercial, artistic and domestic occupations. Their courses may be divided into three main types, as follows:—

- (i) Diploma courses giving advanced training in the technical professions and other fields such as accountancy and art.
- (ii) Vocational courses, usually leading to the award of a certificate, for skilled technical and semi-professional workers. Many of these courses are in fields not covered by an apprenticeship award.
- (iii) Craftsman or artisan training in the apprenticeship trades.

The University of New South Wales (formerly the N.S.W. University of Technology) conducts a number of diploma courses on behalf of the Department of Technical Education.

A brief description of the expansion in technical training since the 1939–45 War appears in Official Year Book No. 43, page 449. The following table gives some indication of the growth of technical education in the years 1953 to 1957.

TECHNICAL EDUCATION : AUSTRALIA.

Year.	No. of Colleges.	No. of Students.	No. of Teachers.(a)	Total Expenditure.
				£
1953 .. .. .	141	178,301	6,688	7,826,645
1954 .. .. .	148	178,527	7,149	9,245,560
1955 .. .. .	151	(b)	7,632	10,058,917
1956 .. .. .	164	(b)	8,364	11,395,445
1957 .. .. .	(b)	(b)	(b)	(b)

(a) Includes both full-time and part-time teachers. (b) Not available.

Training in certain technical aspects of agriculture such as farm mechanics, wool classing, and in related fields such as food technology is also provided by the technical colleges, while the seven State agricultural colleges (*see also* § 27 of Chapter XXII), located in all States except Tasmania, provide comprehensive agricultural courses of two to three years' duration which lead to diplomas in agriculture. At some colleges, other diploma courses are offered in addition, including horticulture, dairying and dairy manufactures, food technology and oenology. The Queensland Agricultural High School and College is administered by the Department of Education; in other States, the Departments of Agriculture are responsible for administration of the colleges.

2. Correspondence Training.—Technical correspondence courses were first offered in Australia about 1910. During the period 1940 to 1944, technical correspondence schools were founded in each State in conjunction with the Commonwealth and these have become an important part of the system of technical education in the Australian States.

These schools not only offer a wide variety of correspondence courses, including trade and apprenticeship, rural, commercial and art courses, but, in addition, provide secondary courses up to matriculation or diploma entrance standard. Students who because of distance or working hours cannot attend technical college classes may enrol for these courses. In New South Wales, "mobile instructional units" consisting of rail cars equipped as self-contained workshops are used to provide practical experience for correspondence students, as well as for the instruction of apprentices and tradesmen at smaller country centres.

In 1955, the Royal Melbourne Technical College established a shortwave broadcasting station to provide further tuition for its correspondence students.

An interesting recent development in technical correspondence education, in which the Australian technical colleges are co-operating with the Commonwealth Government, is the correspondence scholarship scheme operating under the Colombo Plan. Through this scheme, South and South-east Asian students may take correspondence courses conducted by the technical colleges and by the University of Queensland, which has a highly organized system of external tuition. Courses include commercial, rural and teacher-training, engineering and other technical courses. Where practical training is required as part of the course, it is taken by the student in his own country.

3. **Teacher Training.**—Prior to the 1939–45 War, technical colleges were staffed chiefly by men drawn from two sources. They were either trained teachers in the employment of the Education Department or technicians drawn from industry. Although some of the latter were highly qualified, the great majority had not been trained as teachers. In order to remedy this, there has been a move to develop schemes of training technical college teachers without breaking the important link provided by recruiting specialist tradesmen to teach in the colleges. In Victoria, the Technical Teacher's College provides training for students with the appropriate diploma or trade qualifications and suitable industrial experience. In New South Wales, technical college lecturers and tradesmen-instructors receive an in-service course of teacher training in both general educational theory and teaching method, and correspondence courses and visiting lecturers care for the newly appointed teacher-instructor in country colleges. Modifications of this scheme are in operation in other States. Many technical teachers, principally of academic, commercial and domestic science subjects, hold trained teachers' certificates from teachers' colleges.

4. **Colleges, Teachers and Students.**—The number of colleges, teachers and enrolments of individual students during the years 1953 to 1957 are given in the following table:—

**TECHNICAL EDUCATION: COLLEGES, TEACHERS AND ENROLMENTS.**

State.	Colleges.	Teachers			Individual Students Enrolled.		
		Full-time.	Part-time.	Total.	Males.	Females.	Persons.
<b>New South Wales(a)—</b>							
1953.. ..	40	994	1,036	2,030	38,134	19,606	57,740
1954.. ..	42	1,064	1,037	2,101	40,718	20,796	61,514
1955.. ..	42	1,162	1,102	2,264	(b)	(b)	(b)
1956.. ..	45	1,197	1,265	2,462	(b)	(b)	(b)
1957.. ..	(b)	(b)	(b)	(b)	(b)	(b)	(b)
<b>Victoria—</b>							
1953.. ..	37	1,497	1,147	2,644	35,511	14,304	49,815
1954.. ..	43	1,712	1,199	2,911	34,900	14,778	49,678
1955.. ..	45	1,808	1,346	3,154	37,152	15,374	52,526
1956.. ..	47	2,026	1,484	3,510	39,796	14,784	54,580
1957.. ..	50	2,209	1,558	3,767	42,224	16,082	58,306
<b>Queensland—</b>							
1953.. ..	12	143	361	504	14,574	6,732	21,306
1954.. ..	12	147	403	550	12,200	4,420	16,620
1955.. ..	12	161	423	584	12,067	4,555	16,622
1956.. ..	13	165	402	567	12,478	4,461	16,939
1957.. ..	13	167	410	577	12,728	4,469	17,197
<b>South Australia—</b>							
1953.. ..	27	209	494	703	11,439	6,863	18,302
1954.. ..	26	212	549	761	11,922	6,799	18,721
1955.. ..	27	205	530	735	12,675	6,945	19,620
1956.. ..	28	267	583	850	13,478	7,841	21,319
1957.. ..	30	274	663	937	15,123	8,300	23,423
<b>Western Australia—</b>							
1953.. ..	16	173	286	459	8,987	5,736	14,723
1954.. ..	16	203	278	481	9,670	5,948	15,618
1955.. ..	18	200	337	537	10,946	6,341	17,287
1956.. ..	24	237	339	576	12,100	6,703	18,803
1957.. ..	24	257	430	687	13,519	7,512	39,230
<b>Tasmania—</b>							
1953.. ..	9	56	292	348	3,382	2,295	5,677
1954.. ..	9	71	274	345	3,890	2,882	6,772
1955.. ..	7	73	285	358	3,394	2,145	5,539
1956.. ..	7	79	320	399	3,583	2,153	5,736
1957.. ..	7	85	383	468	4,423	2,215	6,638
<b>Total—</b>							
1953.. ..	141	3,072	3,616	6,688	112,027	55,536	167,563
1954.. ..	148	3,409	3,740	7,149	113,300	55,623	168,923
1955.. ..	151	3,609	4,023	7,632	(b)	(b)	(b)
1956.. ..	164	3,971	4,393	8,364	(b)	(b)	(b)
1957.. ..	(b)	(b)	(b)	(b)	(b)	(b)	(b)

(a) Excludes correspondence students as follows: 1953, 10,738; and 1954, 6,818. The figures for 1954 represent enrolment in courses; figures for 1953 are subject enrolments. (b) Not available.

5. Expenditure.—The expenditure on technical education in each State for 1957 is shown in the following table:—

**TECHNICAL EDUCATION: EXPENDITURE, 1957.**  
(Including Loan Fund Expenditure.)  
(£.)

State.	Salaries and Maintenance.	Equipment.	Buildings.	Gross Expenditure.(a)	Receipts—Fees, etc.	Net Expenditure.
New South Wales ..	2,851,224	116,956	695,760	3,732,269	462,661	3,269,608
Victoria(b)(c) ..	3,653,693	68,400	1,080,446	5,639,212	482,129	5,157,083
Queensland ..	526,979	179,158	186,343	892,480	48,158	844,322
South Australia ..	702,848	(d)	251,306	954,154	94,568	859,586
Western Australia(c) ..	652,312	(d)	96,288	748,600	28,733	719,867
Tasmania ..	169,693	42,665	6,904	226,671	4,334	222,337
Aust. Cap. Terr.(c) ..	44,356	1,993	..	50,438	6,552	43,886
<b>Australia(e) ..</b>	<b>8,601,105</b>	<b>409,172</b>	<b>2,317,047</b>	<b>12,243,824</b>	<b>1,127,135</b>	<b>11,116,689</b>

(a) The differences between amounts shown in this column and the sums of the three preceding columns represent expenditure on other items. (b) Includes expenditure on Junior Technical Schools. (c) Year ending June, 1957. (d) Included with salaries and maintenance. (e) There is no technical college in the Northern Territory.

Fees and other receipts are paid into Consolidated Revenue in all States except Victoria, where they are retained and spent by the Technical School Councils. The expenditure on buildings is financed largely from loan moneys, the sums provided from this source in 1957 being: New South Wales, £605,780; Victoria, £1,080,446; Queensland, £152,519; South Australia, £231,993; Western Australia, £35,473; Tasmania, nil.

### § 6. Commonwealth Activities.

Although the primary responsibility for education rests with the States, the Commonwealth Government is committed to a number of educational activities related to its other functions. For example, it maintains officer training colleges and education services for each of its defence services, a School of Pacific Administration for the training of administrative and other officers for service in Commonwealth Territories, and a School of Forestry. In each of the Australian Territories, the educational programme provides for both the native and white children who live there. References to these programmes appear in Chapter V.—The Territories of Australia.

The Australian Broadcasting Commission features school broadcasts and other educational broadcasts as part of its daily programmes. The Commonwealth Scientific and Industrial Research Organization undertakes research, the results of which are made available to educational institutions. In 1951, the Commonwealth Government introduced a free-milk scheme for school children. This extended a service which some State authorities were already providing for a proportion of the school population. Under the Commonwealth Reconstruction Training Scheme, many ex-servicemen and women have received the training which has enabled them to enter a variety of trades and professions.

The Commonwealth Office of Education, established under the Education Act 1945, acts as the Commonwealth's educational adviser, undertakes research work as Commonwealth activities require and is the channel for liaison between Commonwealth and State educational authorities. This office has responsibilities with regard to the education of migrants, international relations, including the association of Australia with the aims and activities of the United Nations Educational, Scientific and Cultural Organization, (UNESCO), and the provision of scholarships and fellowships for selected students under the Technical Co-operation Scheme (Colombo Plan) and under the scheme known as Australian International Awards.

The activities of the Universities Commission are described in § 8, para. 6.

The Commonwealth assists a number of other bodies concerned with education. Besides grants to organizations such as the Australian Council for Educational Research, grants are made to the States for payment to universities.

Further details of Commonwealth assistance to students (including the Commonwealth Scholarship Scheme) and of grants for universities are given in § 8, para. 6, of this chapter.

### § 7. Australia and International Relations in Education.

Despite its isolation, Australia has always been responsive to educational developments in oversea countries, particularly those in the United Kingdom, but it is only recently that it has begun to make any considerable impact on educational thought overseas.

*In this connexion, there have been important developments since the 1939–45 War. For instance, there has been a remarkable increase in the volume of information on educational matters exchanged between Australia and South-east Asia, and Australia participates in the Technical Co-operation Scheme (Colombo Plan), the United Nations Technical Assistance programme, the cultural programme of SEATO, and the scheme of Australian International Awards, under which a limited number of scholarships are given annually.*

Perhaps the most important single factor behind the quickening of Australian interest in international cultural affairs has been membership of UNESCO. Australia has been a member since 1946. Eleven expert committees in Australia are responsible for a wide and varied programme of activities on behalf of UNESCO. Their advice has helped to make Australia's contribution to international conferences and seminars highly effective. Other work undertaken by these committees has included the provision of technical material and advice to the countries of South and South-east Asia, the conducting of seminars in Australia, arranging for exhibitions and displays in Australia and overseas, and the publication of handbooks and brochures to assist teachers and other persons in meeting the problems involved in educating for international understanding.

The Australian National Advisory Committee for UNESCO, on which all the other committees are represented, advises the Commonwealth Government and co-ordinates the work of the specialist committees.

### § 8. Universities.

1. *General.*—There are at present, nine universities and two university colleges in Australia. The following list shows the date of foundation and the faculties existing at each university in Australia.

University of Sydney, established in 1850, located in Sydney, New South Wales. Agriculture, Architecture, Arts, Dentistry, Economics, Engineering, Law, Medicine, Science, Veterinary Science.

University of Melbourne, established in 1853, located in Melbourne, Victoria. Agriculture, Architecture, Arts, Dental Science, Economics and Commerce, Education, Engineering, Law, Medicine, Music, Science, Veterinary Science.

University of Adelaide, established in 1874, located in Adelaide, South Australia. Agricultural Science, Arts, Dentistry, Economics, Engineering, Law, Medicine, Music, Science, Technology.

University of Tasmania, established in 1890, located in Hobart, Tasmania. Arts, Commerce, Engineering, Law, Science.

University of Queensland, established in 1909, located in Brisbane, Queensland. Agriculture, Architecture, Arts, Dentistry, Economics and Commerce, Education, Engineering, Law, Medicine, Science, Veterinary Science.

University of Western Australia, established in 1912, located at Nedlands, Perth, Western Australia. Agriculture, Arts, Dental Science, Education, Economics, Engineering, Law, Science. A Medical School has been established and it is expected that the full six year course will be available in 1959.

Australian National University, established in 1946. A post-graduate research institution, located in Canberra, A.C.T. John Curtin School of Medical Research, the Research School of Physical Sciences, the Research School of Social Sciences, the Research School of Pacific Studies.

University of New South Wales, established in 1958 (1948 established as New South Wales University of Technology), located at Kensington, Sydney, New South Wales. Architecture, Commerce, Engineering, Humanities and Social Sciences, Science, Technology. The University also provides part-time instruction in science and engineering at technical colleges in country towns in New South Wales.

University of New England, established in 1954, (1938 established as New England University College), located in Armidale, New South Wales. Agricultural Economics, Arts, Rural Science, Science.

There are also two university colleges in Australia:—Canberra University College, founded in 1930, located in Canberra, Australian Capital Territory, is affiliated with the University of Melbourne, and has degree courses in Arts, Law, Science, and Economics and Commerce, and a diploma in Public Administration; and Newcastle University College, founded in 1951, located in Newcastle, New South Wales, is affiliated with the University of New South Wales and has degree and diploma courses in the faculties of Science,

Technology, Engineering, and Commerce, and diploma courses in the faculties of Architecture, and Humanities and Social Sciences. The Arts courses at the Newcastle University College are provided by the University of New England in co-operation with the University of New South Wales.

A second university in Victoria, Monash University, is at present in course of establishment. Under the Monash University Act, an interim council was appointed in May, 1958, by the Governor-in-Council and includes representatives of academic, scientific and industrial interests, together with three *ex officio* members—the Vice-Chancellor, when appointed, and the Director of Education and the Chief Inspector of Technical Schools in Victoria. The Act provides for training in Pure Science, Applied Science and Technology, Engineering, Agriculture, Veterinary Science, Medicine, Law, Arts, Letters, Education and Commerce. The University is also to provide facilities for university education throughout Victoria by the affiliation of other educational institutions and by the establishment of tutorial, correspondence and vacation classes.

2.—*Expansion within the Universities.*—Within the past 20 years, the appearance of some of the universities has altered to a striking extent. Many new permanent buildings and some temporary ones have been erected and new wings have been added. The universities are expanding their accommodation greatly to meet an expected record enrolment in the next decade.

There was a continuing increase in university enrolments from 1929 (approximately 9,000) to 1940 followed by a slight recession. In the closing year of the 1939–45 War, however, the number of students had risen beyond any previous figure, and rapid post-war expansion was responsible for a peak enrolment of 32,453 students in 1948. After 1948, the numbers decreased each year until 1953 as *ex-service* personnel completed their training under the Commonwealth Reconstruction Training Scheme. Thereafter they increased again and it is expected that by 1965 some 70,000 students will be enrolled in Australian universities. Enrolment in 1957 was 36,815.

3. *Courses.*—A brief survey of developments in university courses since the war up to 1954 was given in Official Year Book No. 42 (p. 476). An outline of some developments during 1955 and 1956 appeared in Year Book No. 43 (p. 453), and one for 1957 in Year Book No. 44 (p. 466).

At the University of New England, a four year degree course in Agricultural Economics commenced in 1958.

At the University of Sydney, a course in Criminology was under consideration late in 1958.

At the University of New South Wales, the establishment of a Faculty of Medicine is under consideration; it is hoped that the first year course will commence in 1960. Several new courses were instituted in 1958—a Bachelor of Science course in Industrial Arts, and in Fuel Technology; a Bachelor of Commerce course in Industrial Relations, and in Wool Commerce; a Bachelor of Engineering course in Naval Architecture; and Master of Technology courses in Civil Engineering, and in Highway and Traffic Engineering.

At the University of Western Australia, the courses available in the Faculty of Medicine were increased in 1958 to include the first, second, fifth and sixth years of the medical course. In 1959, all six years of the course will be available at the University of Western Australia.

For the majority of university courses full-time attendance is required. At most universities, however, certain courses, such as arts, commerce and economics, may also be undertaken by part-time or evening study. At the University of New South Wales, a variety of degree courses are available to evening students.

Several universities have limited systems of external tuition whereby students in country areas may take a restricted number of courses by correspondence. The University of Queensland has developed a system of correspondence tuition which now caters not only for students within the State but for those in the Northern Territory, Papua and New Guinea and adjacent Pacific islands. External students within Queensland receive tutorial assistance at university centres in the principal country towns. In addition, the university co-operates in the Colombo Plan Correspondence Scholarship Scheme (*see p. 584*).

The University of New England's Department of External Studies offers a wide range of subjects for external study, leading to the degree of Bachelor of Arts and the Diploma in Education. External students must attend short annual residential schools of instruction in their subjects, usually held at the university.

4. *Research.*—The research activities of the universities have been greatly stimulated over recent years by the interest and assistance of the Commonwealth and State Governments, of government instrumentalities such as the Commonwealth Bank, the Rural Bank of New South Wales, and the C.S.I.R.O., of private foundations, both oversea and Australian, such as the Nuffield Foundation, the Carnegie Corporation and the Water Research Foundation of Australia, and of industrial undertakings such as General Motors Holdens Limited and Broken Hill Proprietary Company Ltd.

Grants are made by the Commonwealth Government to bodies such as the Post-Graduate Committee in Medicine at the University of Sydney to facilitate arrangements for medical specialists from overseas to lecture and demonstrate advanced techniques in Australia.

During the year, the universities continued research projects in a number of fields, including education, anthropology, psychology, medicine and nuclear physics. Grants have been made by the Commonwealth Government, through the Australian Atomic Energy Commission, to a number of Australian universities for nuclear research.

The further expansion of teaching and research in various agricultural and veterinary fields was assisted by the annual and special grants of the Commonwealth Bank's Rural Credits Development Fund to several Australian universities. The C.S.I.R.O. also contributed to research in these and other fields.

5. *Services*.—The various types of community services provided by the universities are outlined in Official Year Book No. 42 (pp. 476–7). A noteworthy example of service to agriculture and industry is the Tractor Research Station at Werribee, Victoria, which was opened in 1957, as a result of an agreement between the Commonwealth, the States and the University of Melbourne. The station is conducted by the university and carries out tests for manufacturers on new tractors and other agricultural equipment.

6. *The Commonwealth and the Universities*—(i) *General*. The Commonwealth has given support to the Australian universities for many years. Prior to 1939, Commonwealth assistance was almost entirely concerned with research projects carried out by or in collaboration with the universities. During and since the 1939–45 War, the Commonwealth extended assistance to university students, at first to increase the number of highly trained people required for the war effort, then with the object of rehabilitating ex-servicemen, and finally as a social service benefit to the community. For the purpose of reconstruction training, the Commonwealth Government made available to the universities approximately £1 million for buildings and £500,000 for equipment. Since 1951, the Commonwealth has made special grants to the States for their universities and during the same time has continued to support the university institutions for which it is responsible.

(ii) *Assistance to Students*. Up to 1945, the Universities Commission functioned under National Security Regulations but in that year it was established on a permanent basis under the Education Act. After the 1939–45 War, the Commission continued to provide financial assistance to students under an interim scheme until 1951, when the interim scheme was superseded by the Commonwealth Scholarship Scheme.

Under this scheme, 3,000 scholarships are allocated annually to the States on a population basis. These scholarships are tenable at universities and other approved institutions. Awards are made on merit and all successful applicants have their fees paid. In addition, scholarship holders may be paid a living allowance subject to a means test. As from 1st January, 1959, the maximum rates of allowance will be £338 per annum for a scholar living away from home and £221 per annum in the case where he lives at home.

At 30th September, 1958, 11,089 scholars had completed courses of training under the Scheme. At the same date, there were 10,639 scholars in training of whom 9,513 were at universities and 1,126 at other institutions.

As from 1st January, 1959, post-graduate awards for training at Australian Universities will be made available under the Scheme. Up to 100 awards may be granted in 1959 and the benefits comprise a living allowance without a means test and payment to universities for tuition and facilities.

The Universities Commission also provides for the training at universities and similar institutions of ex-service personnel and war widows under the Reconstruction Training Scheme, the Korea and Malaya Training Scheme and the Disabled Members' and Widows' Training Scheme. A detailed description of the Reconstruction Training Scheme was given on page 240 of Official Year Book No. 39. At 30th June, 1958, 21,453 students had completed courses under these schemes and at the same date there were 97 in training.

(iii) *Commonwealth Grants to the States for University Purposes*. Following a report submitted by a committee of enquiry appointed to report on university finances and requirements, the Commonwealth has made grants since 1951 to the States for recurrent expenditure on university purposes. The payments have been made under the various States Grants (Universities) Acts.\*

In 1957, the Prime Minister appointed a committee to investigate the problems of Australian universities. The Committee was given wide terms of reference. Among other things, it was asked to consider the role of the university in the Australian community, the extension and co-ordination of university facilities, technological education at university level, the financial needs of universities and appropriate means of providing for those needs, and the Commonwealth Scholarship Scheme.

\* No. 81 of 1951; No. 75 of 1953; No. 28 of 1955; No. 37 of 1956 and No. 7 of 1957.

In accepting the principal recommendations of the Committee (Murray Report)\* the Commonwealth agreed to continue grants for recurrent expenditure in 1958, 1959 and 1960, to make additional unmatched recurrent grants, and to assist with the capital needs of the universities for building projects and for equipment. The Commonwealth is also to provide grants between 1958 and 1960 for the building programmes of residential colleges affiliated with universities.

The States Grants (Universities) Act No. 27 of 1958 operated from 1st January, 1958, and gave effect to these recommendations. This Act amended those parts of the States Grants (Universities) Act No. 7 of 1957 which referred to 1958 and provided for payments in 1957 to the South Australian School of Mines and Industries.

The maximum Commonwealth recurrent grants for 1958 are shown in the following table:—

**RECURRENT COMMONWEALTH GRANTS TO UNIVERSITIES.**  
(£.)

University.	Emergency Grant for Recurrent Expenditure Payable in 1958.	Amount for Teaching and Administrative Costs of Residential Colleges.	Maximum Amount for General Recurrent Purposes Payable in 1958.	Amount for Teaching and Administrative Costs of Residential Colleges.
(1)	(2)	(3)	(4)	(5)
New South Wales—				
The University of Sydney ..	240,000	6,100	685,000	13,400
The University of New South Wales ..	115,000	2,000	338,300	4,400
The University of New England ..	33,000	1,750	75,750	3,800
Victoria—				
The University of Melbourne ..	215,000	6,000	601,560	13,200
Queensland—				
The University of Queensland ..	135,000	4,200	352,400	9,200
South Australia—				
The University of Adelaide ..	129,000	2,600	326,800	5,700
The South Australian School of Mines and Industries .. ..	..	..	39,500	300
Western Australia—				
The University of Western Australia	90,000	1,800	224,190	4,000
Tasmania—				
The University of Tasmania ..	43,000	550	112,500	1,200
<b>Total .. ..</b>	<b>1,000,000</b>	<b>25,000</b>	<b>2,756,000</b>	<b>55,200</b>

The emergency grant for recurrent expenditure (column 2) is an unmatched grant aimed at assisting the universities to meet some of their most urgent deficiencies in staff and equipment. The general grant for recurrent expenditure is a continuation of matched grants provided since 1951. The maximum amount available in 1958 is shown in column 4. In general terms the matched grants are made on a basis of £1 of Commonwealth money for every £3 of income received by a university from fees and State grants.

Columns 3 and 4 of Table I. show the grants which are required to be paid by each university from the emergency and the general recurrent grants, respectively, for the teaching and administrative costs of residential colleges administered by or affiliated with the university.

Provision is made in the States Grants (Universities) Act No. 27 of 1958 for these grants to be paid, at higher levels, in 1959 and 1960.

Between 1958 and 1960, the Commonwealth will make grants for selected building projects, shown in detail in the Third Schedule to the Act. Payments will be made up to a given maximum for each project, in the same proportion to State grants for these projects as that shown in the totals given for each university in columns 2 and 3 of the following table:—

\* Report of the Committee on Australian Universities (Canberra, Commonwealth Government Printer, 1957).

**COMMONWEALTH GRANTS FOR UNIVERSITY BUILDING PROJECTS, ETC.**  
(£.)

University. (1)	Commonwealth Contribution. (2)	State Contribution. (3)
New South Wales—		
The University of Sydney .. .. .	1,300,000	750,000
The University of New South Wales .. .. .	950,000	1,500,000
The University of New England .. .. .	450,000	450,000
Victoria—		
The University of Melbourne .. .. .	875,000	875,000
Monash University .. .. .	75,000	75,000
Queensland—		
The University of Queensland .. .. .	775,000	775,000
South Australia—		
The University of Adelaide .. .. .	375,000	375,000
Western Australia—		
The University of Western Australia .. .. .	630,000	505,000
Tasmania—		
The University of Tasmania .. .. .	840,000	670,000
<b>Total .. .. .</b>	<b>6,270,000</b>	<b>5,975,000</b>

In addition a grant of 16 per cent. of the cost to the Commonwealth of each project is to be made for equipment.

The Commonwealth is also to make grants for capital buildings for residential colleges affiliated with a university. The Commonwealth will make grants of one half of the cost, at the request of a State, for the purchase, erection or alteration of a building at an affiliated residential college. The maximum amount available for distribution in each State in the period 1958–60 is shown in column 2 of the following table:—

**MAXIMUM COMMONWEALTH GRANTS FOR RESIDENTIAL COLLEGE BUILDINGS.**

(£.)

State. (1)	Maximum Grant. (2)
New South Wales .. .. .	180,000
Victoria .. .. .	170,000
Queensland .. .. .	110,000
South Australia .. .. .	80,000
Western Australia .. .. .	40,000
Tasmania .. .. .	20,000
<b>Total .. .. .</b>	<b>600,000</b>

The grants for capital building projects at universities and residential colleges are payable at any time within the period 1958–60.

7. Teaching and Research Staff.—The following table shows particulars of the teaching and research staff of Australian universities during 1957:—

UNIVERSITIES: TEACHING AND RESEARCH STAFF, 1957.

University or College.	Pro-fessors.	Readers. (a)	Lecturers.(b)		Demonstrators, Tutors and Research Assistants.		Honory Lec-turers and Demon-strators.	Total.
			Full-time.	Part-time.	Full-time.	Part-time.(c)		
Australian National University .. ..	19	14	(d) 81	..	16	1	..	131
Sydney .. ..	55	38	325	232	73	88	49	860
Melbourne .. ..	49	50	248	55	109	82	..	593
Queensland .. ..	33	33	158	192	52	26	(e) 27	521
Adelaide .. ..	32	35	130	62	19	111	..	389
Western Australia .. ..	25	23	82	57	2	31	..	220
Tasmania .. ..	18	9	53	10	6	..	..	96
N.S.W. University of Technology .. ..	20	13	319	286	(f) 111	(g) 1	..	750
New England .. ..	12	12	68	25	16	..	(h) 4	137
Canberra University College .. ..	11	2	30	17	6	6	..	72
Total .. ..	274	229	1,494	936	410	346	80	3,769

(a) Includes associate professors, assistant professors and lecturers-in-charge. (b) Includes senior lecturers and assistant lecturers. (c) Excludes part-time demonstrators. (d) Senior fellows, fellows and research fellows. (e) Department of External Studies. (f) Includes 79 technical officers who in years prior to 1956 were regarded as special research workers, (g) Technical officer. (h) Includes 3 Department of External Studies.

The following table gives details of the teaching and research staff of Australian universities for each year from 1953 to 1957:—

UNIVERSITIES: TEACHING AND RESEARCH STAFF, SUMMARY, AUSTRALIA.

Year.	Pro-fessors.	Readers. (a)	Lecturers.(b)		Demonstrators, Tutors and Research Assistants.		Honory Lec-turers and Demon-strators.	External Studies Staff.	Total.
			Full-time.	Part-time.	Full-time.	Part-time.(c)			
1953 .. ..	215	155	1,180	990	292	263	73	24	3,192
1954 .. ..	227	169	1,227	1,099	300	303	60	26	3,411
1955 .. ..	245	177	1,290	1,062	290	321	66	29	3,480
1956 .. ..	265	196	1,383	1,031	(d) 400	(e) 349	49	29	3,702
1957 .. ..	274	229	1,494	936	(d) 410	(e) 346	50	30	3,769

(a) Includes associate professors, assistant professors and lecturers-in-charge. (b) Includes senior lecturers, assistant lecturers, senior fellows, fellows and research fellows. (c) Excludes part-time demonstrators. (d) Includes technical officers of the New South Wales University of Technology, previously regarded as special research workers (1956, 70; 1957, 79). (e) Includes one technical officer of the New South Wales University of Technology.

8. Students.—(i) Total. The number of students (of whom 58 males and 5 females were Commonwealth Reconstruction Training Scheme students) enrolled for courses at the universities for the year 1957 is shown in the following table.

## UNIVERSITIES: STUDENTS ENROLLED, 1957.

University or College.	Degree Courses.	Diploma Courses.		Certificate Courses.	Miscellaneous Subjects.	Adjusted Total.(a)
		Post-graduate.	Sub-graduate.			
Australian National University..	83	..	..	..	5	88
Sydney .. .. .	7,117	99	975	..	155	8,303
Melbourne .. .. .	6,999	166	297	155	432	7,916
Queensland .. .. .	3,974	34	664	707	267	5,615
Adelaide .. .. .	3,249	153	809	7	591	4,759
Western Australia .. .. .	2,167	106	..	..	112	2,376
Tasmania .. .. .	723	62	54	154	66	1,033
N.S.W. University of Technology .. .. .	1,911	..	3,017	112	219	5,246
New England .. .. .	1,029	115	..	..	32	1,171
Canberra University College ..	258	..	18	..	127	396
<b>Total</b> .. .. .	<b>27,510</b>	<b>735</b>	<b>5,834</b>	<b>1,135</b>	<b>2,006</b>	<b>36,903</b>

(a) Adjustment made for students enrolled for more than one course.

Of the students enrolled in 1957, 28,816 were males and 8,087 females. Included in those enrolled for degrees were 83 enrolled for higher degree courses at the Australian National University, 191 in Sydney, 230 in Melbourne, 115 in Queensland, 224 in Adelaide, 148 in Western Australia, 37 in Tasmania, 248 at the New South Wales University of Technology, 51 at the University of New England and 30 at the Canberra University College. In addition, 670 students at the University of Sydney were doing higher degree courses but were not enrolled.

The following table shows the number of students enrolled at Australian universities for each of the years from 1953 to 1957.

## UNIVERSITIES: STUDENTS ENROLLED, SUMMARY, AUSTRALIA.

Year.	Degree Courses.		Diploma Courses.		Certificate Courses.	Miscellaneous Subjects.	Adjusted Total.(a)
	Higher Degrees.	Bachelor Degrees.	Post-graduate.	Sub-graduate.			
1953 .. .. .	800	19,796	318	5,190	511	2,306	28,838
1954 .. .. .	917	20,358	315	5,093	677	2,191	29,445
1955 .. .. .	1,094	21,539	321	5,153	801	2,130	30,868
1956 .. .. .	1,188	23,686	550	5,977	1,025	2,206	34,480
1957 .. .. .	1,357	26,153	735	5,834	1,135	2,006	36,903

(a) Adjustment made for students enrolled for more than one course.

(ii) *New Students Enrolled.* The number of new students enrolled for courses at the universities during the year 1957 is shown in the following table:—

## UNIVERSITIES: NEW STUDENTS ENROLLED, 1957.

University or College.	Degree Courses.	Diploma Courses.		Certificate Courses.	Miscellaneous Subjects.	Adjusted Total.(a)
		Post-graduate.	Sub-graduate.			
Australian National University..	22	..	..	..	1	23
Sydney .. .. .	1,987	12	358	..	64	2,421
Melbourne .. .. .	1,636	19	64	17	181	1,896
Queensland .. .. .	1,028	3	192	206	150	1,578
Adelaide .. .. .	880	35	259	3	174	1,345
Western Australia .. .. .	586	2	..	..	38	626
Tasmania .. .. .	204	2	14	64	25	308
N.S.W. University of Technology .. .. .	597	..	709	43	147	1,496
New England .. .. .	497	48	..	..	24	569
Canberra University College ..	83	..	5	..	70	156
<b>Total</b> .. .. .	<b>7,520</b>	<b>121</b>	<b>1,601</b>	<b>333</b>	<b>874</b>	<b>10,418</b>

(a) Adjustment made for students enrolled for more than one course.

Of the new students enrolled in 1957, 7,667 were males and 2,751 females. Included in those enrolled for degrees were 119 enrolled for higher degree courses—Australian National University 22, Sydney 15, Melbourne 14, Queensland 2, Adelaide 12, Western Australia 5, Tasmania 2, New South Wales University of Technology 31, New England 12 and Canberra University College 4.

The following table shows the number of new students enrolled at Australian universities during each of the years from 1953 to 1957.

UNIVERSITIES: NEW STUDENTS ENROLLED, SUMMARY, AUSTRALIA.

Year.	Degree Courses.		Diploma Courses.		Certificate Courses.	Miscellaneous Subjects.	Adjusted Total.(a)
	Higher Degrees.	Bachelor Degrees.	Post-graduate.	Sub-graduate.			
1953 .. ..	84	4,958	9	1,288	118	904	7,335
1954 .. ..	137	4,951	37	1,265	175	860	7,420
1955 .. ..	125	5,791	55	1,412	254	926	8,549
1956 .. ..	134	6,881	112	2,184	317	976	10,590
1957 .. ..	119	7,401	121	1,601	333	874	10,418

(a) Adjustment made for students enrolled for more than one course.

9. **University Income for General Activities.**—The income of the universities is derived principally from State and Commonwealth Government grants, students' fees, and income from private foundations. From all sources other than new bequests, the income during 1957 for general university functions was as shown in the table below. In South Australia, Government grants and income from private foundations include amounts in respect of the Waite Agricultural Research Institute.

UNIVERSITIES: INCOME FOR GENERAL ACTIVITIES, 1957.

(£.)

University or College.	Government Grants.	Students' Fees.	Interest, Rent, Dividends and Donations.	Other.	Total.
Australian National University	1,527,500	630	41,370	315,337	1,884,837
Sydney .. ..	1,543,367	646,271	64,736	52,581	2,306,955
Melbourne .. ..	1,428,076	526,922	62,454	40,893	2,058,345
Queensland .. ..	912,429	251,532	29,000	24,142	1,217,103
Adelaide .. ..	921,814	137,868	59,653	7,072	1,126,407
Western Australia .. ..	750,961	36,348	17,386	25,913	830,608
Tasmania .. ..	383,925	36,553	924	5,971	427,373
N.S.W. University of Technology .. ..	2,063,569	197,310	..	41,403	2,302,282
New England .. ..	450,018	34,904	818	61,098	546,838
Canberra University College .. ..	136,500	10,345	..	1,422	148,267
<b>Total .. ..</b>	<b>10,118,159</b>	<b>1,878,683</b>	<b>276,341</b>	<b>575,832</b>	<b>12,849,015</b>

10. **Principal University Benefactions.**—Earlier issues of the Official Year Book included details of the principal private benefactions to universities. (See Year Book No. 40, pp. 467-8.)

11. **University Expenditure for General Activities.**—The principal item of disbursements on general university activities is the maintenance of the teaching and research staff, representing 66.0 per cent. of the total in 1957 compared with 62.9 per cent. in 1956.

The following table shows the expenditure including capital expenditure during the year 1957:—

**UNIVERSITIES: EXPENDITURE FOR GENERAL ACTIVITIES, 1957.**

(£.)

University or College.	Adminis- tration.	Maintenance of—			Other (including Buildings.)	Total.
		Teaching and Research Depart- ments.	Premises and Grounds.	Libraries.		
Australian National University	117,319	1,117,581	127,020	47,763	434,797	1,844,480
Sydney .. .. .	264,897	1,572,954	222,281	68,065	87,085	2,215,282
Melbourne .. .. .	178,315	1,425,123	212,647	81,568	160,344	2,057,997
Queensland .. .. .	89,931	943,251	84,903	50,423	31,065	1,199,573
Adelaide .. .. .	100,443	828,711	104,142	53,399	137,877	1,224,572
Western Australia .. .. .	68,990	566,208	71,949	39,657	109,638	856,442
Tasmania .. .. .	54,034	284,039	27,693	29,984	119,540	515,290
N.S.W. University of Technology	146,141	1,395,099	120,336	70,014	547,145	2,278,735
New England .. .. .	70,452	252,269	43,351	28,134	123,352	517,558
Canberra University College ..	23,639	96,089	5,926	14,117	16,903	156,674
<b>Total .. .. .</b>	<b>1114161</b>	<b>8,481,324</b>	<b>1,020,248</b>	<b>483,124</b>	<b>1,767,746</b>	<b>12,866,603</b>

12. **Funds for Special Purposes.**—(i) *General.* The tables shown in paras. 9 and 11 relate to general university activities while the two which follow show the financial position of the special purpose funds which are, in the main, for special research purposes.

(ii) *Income for Special Purposes.* The following table shows the main items of income for the year 1957:—

**UNIVERSITIES: INCOME FOR SPECIAL PURPOSES, 1957.**

(£.)

University or College.	Government Grants.	Interest, Rent, Dividends and Donations.	Public Examina- tion Fees.	Special Research Grants.	Other.	Total.
Australian National University	..	5,604	..	23,177	6,028	34,809
Sydney .. .. .	257,000	75,021	..	683,306	27,819	1,043,146
Melbourne .. .. .	342,437	204,225	114,277	188,477	90,637	940,053
Queensland .. .. .	3,500	53,445	54,970	53,847	49,136	214,898
Adelaide .. .. .	20,701	26,074	35,898	116,709	10,241	209,623
Western Australia .. .. .	50,000	67,369	35,802	55,446	31,398	240,015
Tasmania .. .. .	7,779	4,281	5,165	30,764	554	48,543
N.S.W. University of Technology	3,550	23,165	..	54,067	66,494	147,276
New England .. .. .	200,000	28,421	..	28,161	6,620	263,202
Canberra University College ..	54,959	55	..	1,875	..	56,889
<b>Total .. .. .</b>	<b>939,926</b>	<b>487,660</b>	<b>246,112</b>	<b>1,235,829</b>	<b>288,927</b>	<b>3,198,454</b>

(iii) *Expenditure for Special Purposes.* The following table shows the main items of expenditure for the year 1957:—

**UNIVERSITIES: EXPENDITURE FOR SPECIAL PURPOSES, 1957.**  
(£.)

University or College.	Special Purpose Funds (Research)	Other Special Purposes.	Public Examination Expenses.	Scholarships, Bursaries, etc.	Other, (including Buildings).	Total.
Australian National University	..	..	..	3,484	19,361	22,845
Sydney .. .. .	242,143	135,958	..	17,575	706,170	1,101,846
Melbourne .. .. .	169,643	180,823	96,253	6,412	674,366	1,127,497
Queensland .. .. .	56,275	47,142	66,415	4,040	13,626	187,498
Adelaide .. .. .	146,141	23,672	32,086	3,835	..	205,734
Western Australia .. .. .	49,209	296	32,750	23,183	100,046	205,484
Tasmania .. .. .	19,631	..	4,393	2,796	..	26,820
N.S.W. University of Technology	70,423	74,104	11,353	..	..	155,880
New England .. .. .	11,162	10,643	..	318	269,169	291,292
Canberra University College ..	3,598	19,705	..	6,450	27,009	56,762
<b>Total .. .. .</b>	<b>768,225</b>	<b>492,343</b>	<b>243,250</b>	<b>68,093</b>	<b>1,809,747</b>	<b>3,381,658</b>

13. *Degrees Conferred, etc.*—The following table shows the number of degrees conferred and diplomas and certificates granted for males and females separately at each university during the year 1957:—

**UNIVERSITIES: DEGREES CONFERRED, AND DIPLOMAS AND CERTIFICATES GRANTED, 1957.**

Course.	Aust. National Univ.		Sydney.		Melbourne. (a)		Queensland.		Adelaide.		Western Australia.		Tasmania.		N.S.W. Univ. Tech.		New England.		Australia.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
<b>Degrees—</b>																						
Agriculture .. .. .	..	..	28	7	20	6	6	1	17	..	10	1	..	..	..	..	..	..	..	..	81	15
Architecture .. .. .	..	..	13	5	26	2	1	2	..	..	..	..	..	..	..	..	..	..	..	..	47	10
Arts .. .. .	7	1	136	137	147	140	47	34	29	21	50	26	30	21	..	7	..	1	..	..	469	399
Dentistry .. .. .	..	..	49	1	10	..	16	3	7	..	6	1	..	..	..	..	..	..	..	..	88	5
Divinity .. .. .	..	..	..	..	..	..	31	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Economics .. .. .	..	..	60	6	104	8	31	..	23	..	..	..	..	9	..	..	..	..	..	..	227	14
Education .. .. .	..	..	1	..	70	11	20	4	..	..	19	3	..	..	..	..	..	..	..	..	110	18
Engineering .. .. .	..	..	98	..	96	..	71	1	62	..	38	..	..	8	..	78	..	..	..	..	451	1
Law .. .. .	..	..	64	4	51	8	14	..	10	..	10	..	11	..	..	..	..	..	..	..	160	12
Medicine(b) .. .. .	3	..	257	44	146	19	54	9	63	11	..	..	..	..	..	..	..	..	..	..	523	83
Music .. .. .	..	..	..	..	2	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	4
Science .. .. .	2	..	131	39	105	43	69	28	82	15	41	7	31	5	113	2	14	1	..	..	588	140
Veterinary Science .. .. .	..	..	29	2	..	..	16	..	..	..	..	..	..	..	..	..	..	..	..	..	45	2
<b>Total .. .. .</b>	<b>12</b>	<b>7</b>	<b>866</b>	<b>245</b>	<b>777</b>	<b>241</b>	<b>346</b>	<b>82</b>	<b>293</b>	<b>47</b>	<b>174</b>	<b>38</b>	<b>89</b>	<b>26</b>	<b>198</b>	<b>3</b>	<b>37</b>	<b>20</b>	<b>2,792</b>	<b>703</b>		
<b>Post-graduate Diplomas—</b>																						
Education .. .. .	..	..	53	42	38	17	8	19	12	5	54	17	15	6	..	..	19	22	..	..	199	128
Medicine .. .. .	..	..	27	7	7	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	34	9
Other .. .. .	..	..	1	2	5	..	5	..	..	..	7	2	..	..	..	..	..	..	..	..	18	4
<b>Total .. .. .</b>	<b>..</b>	<b>..</b>	<b>81</b>	<b>51</b>	<b>50</b>	<b>19</b>	<b>13</b>	<b>19</b>	<b>12</b>	<b>5</b>	<b>61</b>	<b>19</b>	<b>15</b>	<b>6</b>	<b>..</b>	<b>..</b>	<b>19</b>	<b>22</b>	<b>..</b>	<b>..</b>	<b>251</b>	<b>141</b>
<b>Sub-graduate Diplomas—</b>																						
Certificates .. .. .	..	..	..	..	9	..	38	35	31	39	..	..	2	..	..	..	..	..	..	..	95	126
<b>Total .. .. .</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>110</b>	<b>7</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>1</b>	<b>15</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>111</b>	<b>22</b>

(a) Includes degrees conferred on students of the Canberra University College. (b) Since separate degrees for M.B. and B.S. are conferred by the University of Sydney, the number of persons who qualify at that University to practise is approximately half the number of degrees conferred.

### § 9. Further Education.

1. **General.**—Beyond the schools, colleges and universities, there are agencies engaged in less direct educational work which cannot be readily assessed and described. Among them are the media of mass communication (press, film, radio and television) which are powerful educational forces—whether they are used specifically to disseminate information such as new agricultural techniques or preventive health measures, or, on the other hand, in a much more general way to exert a powerful influence on the cultural level of the population. There are also bodies and institutions such as the adult education authorities, libraries, art galleries and museums which aim at catering for the educational and cultural needs of the general public.

2. **Adult Education.**—(i) *General.* The term “adult education” is used in Australia to refer in the main to non-vocational educational and cultural activities for adults provided by some of the universities and by various adult education authorities, which vary in form from State to State.

The Workers' Educational Association movement, which has for its object the bringing of the universities into closer relationship with the community in general, and providing for the higher education of the workers in civic and cultural subjects, has been active in Australia. In 1913, associations were formed in all the Australian States. In four States the associations have been superseded by Adult Education Boards or Councils—set up by the State Governments in Victoria, Queensland and Tasmania and by the university in Western Australia. In the other two States, New South Wales and South Australia, the associations continue to co-operate with the universities in their extension work and are given direct grants by the governments concerned.

While the choice of courses offered by these bodies is naturally more limited in the smaller States, a variety of topics including social studies and current affairs, language and literature, drama, music, arts and crafts are available in all States.

(ii) *New South Wales:* (a) *Adult Education Advisory Board.*—State Government grants for adult education are allocated by the Adult Education Advisory Board. Grants are made to the University of Sydney (Department of Tutorial Classes), the Workers' Educational Association, the University of New England (Department of Adult Education), the Public Library of N.S.W. (Adult Education Section) and the Arts Council of Australia (N.S.W. Division).

(b) *University of Sydney.*—The Extension Board of the University of Sydney provides lectures and short courses in city and country.

In 1914, the Department of Tutorial Classes was established to provide classes and study groups along the lines of similar work in England. Its activities include the provision of tutorial classes in a wide variety of subjects, discussion groups and “kits” to serve the needs of country districts and people who cannot be catered for by tutorial classes, and publication of the fortnightly *Current Affairs Bulletin*. This publication, begun in 1942 and produced for four years by the Australian Army Education Service, was recommenced in 1947 as a civilian and service publication by the Commonwealth Office of Education. At the beginning of 1952, the Department of Tutorial Classes took over full responsibility for the bulletin. It receives an annual grant from the Commonwealth Government for this purpose.

In 1957, there were 131 tutorial classes (78 in the metropolitan area and 53 in the country) with a total enrolment of 3,714, 145 discussion groups (68 in the metropolitan area, 77 in the country) with a total enrolment of 2,241, and 42 kits groups with an estimated membership of 660, who studied a total of 45 kits.

The Department works in conjunction with the Workers' Educational Association through the Joint Committee of Tutorial Classes, appointed by the university senate.

(c) *Workers' Educational Association.*—In addition to co-operating with the Department of Tutorial Classes in organizing certain classes and groups, the Association itself provides classes in a wide variety of fields. It publishes *Highway*, a bi-monthly journal of adult education and maintains a property near Sydney where short residential schools are held throughout the year.

In 1957, the Association ran 47 classes, for which there were 3,309 enrolments.

(d) *University of New England.*—When the New England University College became an autonomous university in 1954, its Department of Adult Education took over full responsibility for the activities formerly undertaken by it on behalf of the Department of Tutorial Classes of the University of Sydney. It brings university extension activities to the people of northern New South Wales and conducts classes in arts and social sciences in towns throughout this region. Short residential courses are held on topics of interest to primary producers in the area.

(e) *Public Library of New South Wales.*—The Public Library's Adult Education Section provides an adult education library service for all classes and groups conducted by the Department of Tutorial Classes of the University of Sydney, the Workers' Educational Association, and the Department of Adult Education of the University of New England.

(f) *Arts Council*.—The New South Wales Division of the Arts Council of Australia provides a mobile theatre unit and organizes touring companies in ballet, opera and drama to country towns. Musicians provide some short lecture courses in the city.

(g) *Education Department*.—The New South Wales Education Department provides evening colleges, housed in its schools and staffed by trained teachers, which provide non-vocational courses in a wide variety of crafts, dramatic and musical activities. Adults may prepare for the Intermediate and Matriculation examinations at certain of these colleges.

(iii) *Victoria*.—The Council of Adult Education is a government instrumentality established by the Adult Education Act 1946. Its aims are to stimulate adult education in Victoria and to encourage voluntary organizations and associations by giving them advice and assistance. Its activities include a variety of classes (88 were available in 1957) on topics ranging from social studies, psychology, language and literature, to crafts, music, drama, travel and deportment, and usually lasting from 10 to 20 weeks. An annual 10-day summer school is another important activity. The Council publishes a monthly bulletin, *C.A.E. Newsletter* and a quarterly journal, *Adult Education*. Its group service assists and provides programme material for the discussion groups formed by organizations and individuals throughout the State. In 1956-57, there were 4,698 enrolments for classes and 2,514 individual enrolments for 215 discussion groups.

A recent development of importance is the extension of the council's activities, including classes and discussion groups, to the prisons, as part of a general plan for penal reform in Victoria.

Through its Community Arts Service, the Council organizes tours by musicians and by theatrical and other companies in country towns which otherwise would have no opportunity of seeing such performances: It provides an advisory service to musical societies and co-operates with the National Gallery of Victoria in the organization of travelling art exhibitions.

The council's income is derived mainly from a government grant, but also from student fees and Community Arts Service performances.

(iv) *Queensland*.—The Queensland Board of Adult Education was constituted in 1944 and is responsible under the Minister for Education for the provision of adult education facilities throughout the State. Under the executive officer of the Board, the Supervisor, are five district officers, based in large country towns, who are responsible for organizing activities in country areas.

The cost of the programme is borne by the State Government and admission to all courses is free. Activities include lectures, group meetings on a variety of topics, generally short-term but some of which extend over a full year, and film screenings. Library and film services are provided for adult education groups.

In 1957, enrolments in lectures totalled 1,808. Some form of adult education activity was available in almost 200 centres.

(v) *South Australia*.—Since 1917, the University of Adelaide, through the Joint Committee for Tutorial Classes, has provided each year in the metropolitan area a series of tutorial classes, lecture classes and study circles on a wide range of subjects of cultural and current interest. Fees are paid direct to the Workers' Educational Association, which organizes these classes. The Joint Committee extends its activities into the larger country centres by sending art exhibitions and plays on tour, lending boxes of books and arranging lectures and film screenings.

The Education Department also caters for adults in country towns by providing evening classes, particularly in arts and crafts, at adult education centres.

Adult education in South Australia is expanding. In 1956, the university appointed a director of adult education, who took up duty in 1957.

(vi) *Western Australia*.—Adult education in Western Australia is organized by the Adult Education Board, established in 1928 under the terms of the statutes of the University of Western Australia. The board has a considerable degree of autonomy. Its executive officer is the Director of Adult Education.

The board conducts lecture classes in the city and in a few suburban centres. Thirty-seven classes were held in 1957, with a total enrolment of 1,460. It sponsors musical and dramatic performances by outstanding artists both in the city and country, and arranges for screenings of foreign films. Its library provides a box scheme for discussion groups, of which there were some 68 scattered throughout the State in 1957.

The board holds an annual summer school in January, coinciding with the Festival of Perth, for the inauguration of which it was largely responsible.

The board's finance is derived from university grants, while many of its activities are self-supporting. The State Government makes grants for the board's work in country areas.

(vii) *Tasmania*. Some form of adult education has existed since the formation in 1913 of a Workers' Educational Association, which worked in conjunction with the University of Tasmania for a number of years, receiving a grant through the university, which had

a Director of Tutorial Classes. Later the grant was paid direct to the Association by the Government and the university's tutorial department ceased to exist. In 1948, the Adult Education Act was passed providing for the formation of an Adult Education Board whose functions are to plan and develop adult education in Tasmania and to assist other bodies actively engaged in adult education.

The executive officer of the board is the Director of Adult Education, at Hobart. Activities are organized on a regional basis by organizers based in Hobart, Launceston and three large country centres.

The board organizes classes of ten weeks' duration on a wide range of subjects. In 1956-57, 742 classes with an enrolment of more than 7,000 were held throughout the State. It sponsors special lectures, film screenings and art exhibitions, recitals of music and dramatic performances, in both city and country areas. Its income is derived from a State Government grant and from student fees.

3. **The New Education Fellowship.**—The New Education Fellowship is a world organization of parents, educators, and other citizens interested in the development of new educational practices. It was founded in London in 1915 and spread to Australia at the time of a regional conference held here in 1937. There are now sections in each State. Its Australia-wide journal *New Horizons in Education* is published quarterly.

4. **Migrant Education.**—The Commonwealth Government's post-war immigration policy has brought to Australia some thousands of immigrants with little or no knowledge of English. To assist their assimilation into the Australian community, a system of migrant education has been developed to teach them English and to give them information about Australia.

Before arriving in Australia, migrants who do not speak English are taught English by shipboard education officers.

In Australia, free evening classes are arranged by State Education Departments wherever a group of nine or more migrants in country areas, or twelve or more migrants in city areas, wish to learn English. Should migrants find it impossible to attend classes, they may apply, through State Education Departments, for a free correspondence course in English. In addition, English lessons are broadcast regularly by the Australian Broadcasting Commission. The Commonwealth Office of Education provides technical advice on all aspects of migrant education and is responsible for the preparation of teaching materials.

In July, 1958, 16,183 migrants were enrolled in evening classes and 11,227 were taking correspondence lessons. At the same time, 16,730 migrants were receiving the monthly booklet accompanying the radio lessons.

### § 10. The Commonwealth Literary Fund.

In 1908, the Commonwealth Government under Alfred Deakin first established the Commonwealth Literary Fund. The Fund was entirely a compassionate one devoted to literary pensions for aged or infirm authors, for the families of literary men who died in poverty and for writers who were unable for financial reasons to continue their activities.

In 1938, in an endeavour to encourage the development of Australian literature and to foster appreciation for it, the Commonwealth Government greatly enlarged the scope of the Fund. The Fund now awards a limited number of Fellowships each year, assists in the publication of manuscripts of high literary merit, makes grants for lectures in Australian literature and awards pensions to writers who have achieved a nation-wide reputation for their work in the field of creative literature.

The Fellowships are awarded each year to writers who have proved their capacity to do creative work in the field of literature but who are prevented from exercising their abilities because of financial circumstances. The Fellowship gives a writer the opportunity to devote all his time to creative writing for a period of up to one year. Since 1956, the Fellowships have had a maximum value of £1,000 per annum.

Australian writers are assisted into print where their work is of outstanding literary merit but would not be an attractive commercial proposition. The Fund does this by guaranteeing publishers against loss up to a limited amount. The Fund does not itself enter the field of the publisher.

Since 1940, annual grants have been made to each State University, including the University of New England and the Canberra and Newcastle University Colleges, for lectures in Australian literature. In 1956, the Fund decided to extend the scheme to cover lectures to the general public in the capital cities and in provincial and country centres. The first series of lectures to the general public was conducted in Tasmania with the co-operation of the Tasmanian Board of Adult Education. In 1957 and 1958, lectures were given in Queensland and Western Australia with the co-operation of the Queensland Board of Adult Education and the Board of Adult Education in Western Australia, respectively. In 1959, lectures will be given in South Australia with the co-operation of the Adult Education authorities.

The Fund also assists literary magazines of established literary merit.

The Fund is administered by a Committee consisting of the Prime Minister (Chairman), the Leader of the Country Party and the Leader of the Opposition in the House of Representatives.

The Committee is assisted by an Advisory Board of five persons with literary qualifications.

### § 11. Libraries.

1. **General.**—The Munn-Pitt Report of 1935 greatly stimulated interest in libraries and librarianship throughout Australia. This is seen in the rapid development of libraries in all States, all of which have now passed legislation to increase library services, and in the establishment in 1937 of the Australian Institute of Librarians to improve the standard of librarianship. This body was reconstituted in 1949 as the Library Association of Australia, its functions now including the promotion and improvement of libraries and library services. The Association conducts annual examinations for which students are prepared by courses of instruction in all States. Formal library schools exist in the Commonwealth National Library, Canberra, and the Public Libraries at Sydney and Melbourne.

2. **Commonwealth.**—(i) *Commonwealth National Library.* This library grew directly from the Library of the Commonwealth Parliament established in 1901. Whilst providing, as a primary responsibility, for the general reading and reference needs of the Members of Parliament, it has developed into a central source of information for the government and its departments and other agencies. The close association of the National Library with the central government follows the pattern of the Library of Congress at Washington, U.S.A. Like the latter, it has also inherited the basic elements of the national library concept of the older countries of Europe: that a national library is the proper place to collect the national literature systematically and to make it known and available for use, and that it is a place to which scholars may turn for what is most significant in the literature of other countries.

Through its Legislative Reference Branch, the National Library aims to provide for the Parliament and the government an up-to-date reservoir of fact and opinion on public issues both domestic and foreign. In addition to assembling material, the staff compiles bibliographies and reference guides to the literature on special subjects and in 1958 handled 1,100 inquiries involving special search. A further service to the government flows from the activities of the Archives Division, a central element in the government machinery for the management and preservation of its records. Archival repositories for Commonwealth records are maintained in Canberra, Sydney, Melbourne, Brisbane, Adelaide and Perth.

As well as the governmental record of national life and development, the National Library systematically collects and preserves Australian books, periodicals, newspapers, government publications, pictures, prints, manuscripts, maps, moving-picture films and sound recordings. It is assisted by the Copyright Act 1912–1950, which requires one copy of all material printed in Australia to be deposited in the Library, and has been enriched by the acquisition of such notable collections as the Petherick collection of 16,500 items in 1911, the Cook manuscripts in 1923, the Cumpston collection on Public Health in Australia in 1936, the Mathews ornithological collection in 1940, and the Ferguson sociological collection now being transferred to the Library. A special feature of the Library's Australian work is the copying on microfilm, in association with the Public Library of New South Wales, of all important unique material overseas relating to Australia, including more than a million pages in the Public Record Office in London.

The Library fulfils its obligations to make Australian publications widely known, both at home and abroad, through a series of select lists which include *Australian Public Affairs Information Service* (monthly with an annual cumulation) and *Australian Books* (annual) and full bibliographies in the monthly *Australian Government Publications* and *Books Published in Australia*, cumulated as the *Annual Catalogue of Australian Publications*. Collections of Australian books are maintained by the library at all posts at which Australia is officially represented abroad. In London and New York the National Library maintains and staffs Australian Reference Libraries.

The Library is the central library of documentary and educational films and the non-theatrical film-distributing agency in Australia for the Australian National Film Board, and its film collection contains nearly 4,300 titles, together with Australian historical films and a great number of film strips. Special efforts are being made to discover and preserve samples of early Australian film-making.

Local library services are provided by the Library for the residents of the Australian Capital Territory, the Northern Territory, the Territory of Papua and New Guinea, Norfolk Island and Nauru.

The National Library's collections contain approximately 520,000 volumes, together with very extensive holdings of pamphlets, pictures, prints, maps, manuscripts and microfilm,

and about 5½ million feet of moving-picture films. Its permanent and temporary holdings of archives were, in 1958, approximately 122,000 cubic feet. Special features of the Library's book collections are its strong holdings of Australiana, materials relating to the Pacific area and to East and South-east Asia, the publications of foreign governments and of international organizations, works in the social sciences and in particular in political theory and economics.

(ii) *Patent Office Library.* The Library of the Commonwealth Patent Office, Canberra, contains approximately 8,500 books and a wide variety of periodicals and other literature relating to pure and applied science, industrial technology and the industrial property (patent, trade mark, design and copyright) laws and practice of most countries. Patent specifications of inventions are received from the principal countries of the world; present holdings are more than 6,000,000.

(iii) *The Australian War Memorial Library.* In the War Memorial library, are housed the documentary and pictorial records of Australia's fighting services, together with collections covering the war in Korea, 1950–53, and earlier wars in which Australian troops participated—Sudan, 1885, South Africa, 1899–1902 and the Boxer Rebellion in China, 1900–01. Books, periodicals and other records covering contemporary trends and events in the fields of military history and military science are constantly being added.

The printed records section contains approximately 65,000 volumes, a large collection of military maps, newscuttings and newspapers, sound recordings of war leaders, personalities and events, war posters and postage stamps. Many personal collections by distinguished soldiers and historical documents relating to the wars have also been placed in the Memorial's custody for preservation.

Written records comprise correspondence files of headquarters and units of both world wars, and the original war diaries compiled from day to day by each unit during its service.

The collection of official war photographs covering the 1914–18, 1939–45 and Korean Wars numbers over 250,000, and a collection of official motion picture film depicts Australia at war.

Facilities for public research are not yet fully developed, but all requests for information are met where practicable.

(iv) *Other Departmental Libraries.* The following Commonwealth authorities in Canberra have specialized collections in their own fields, and in addition draw largely on the National Library:—Attorney-General's Department, Commonwealth Bureau of Census and Statistics, Commonwealth Forestry and Timber Bureau, Department of Trade, Department of Primary Industry, Department of External Affairs, Department of Territories, Department of Health, Department of National Development, Commonwealth Public Service Board, Department of Customs and Excise, Department of Works, and News and Information Bureau of the Department of the Interior.

The Department of Labour and National Service has its main library in Melbourne and branch libraries in Sydney and Adelaide. Other departmental libraries in Melbourne are those of the Department of Air, Department of Defence, Department of Social Services, Repatriation Commission and Postmaster-General's Department. The library of the Commonwealth Office of Education is in Sydney.

(v) *Commonwealth Scientific and Industrial Research Organization.* The head office in East Melbourne maintains a library covering all branches of science except the medical sciences. In addition, each division and section of the organization has its own library; together, these form a series of specialist libraries covering such subjects as food preservation, forest products, industrial chemistry and physics, fisheries, agriculture, animal husbandry, and building research. There are 39 such branches, each with its own staff, and also smaller collections under the care of research officers aided by visiting librarians. The head office library maintains a union catalogue of the holdings of all C.S.I.R.O. libraries, and small union catalogues are being developed among groups of branch libraries with similar interests. The collections are particularly strong in the publications of oversea scientific and technical research institutions, with many of which exchange relations exist. The general public may have access to these materials for reference purposes. The head office library and most of the larger branches have photocopying facilities. This service is normally for the use of officers of the organization itself, but where the organization holds a publication not available elsewhere in Australia photocopies will be made on request.

3. *States.*—(i) *Metropolitan Public Libraries.* In each of the capital cities, there is a well-equipped public library, the libraries in Melbourne and Sydney especially comparing very favourably with similar institutions elsewhere in the world. The following statement gives the number of volumes in the public library of each capital city at 30th June, 1957.

## METROPOLITAN PUBLIC LIBRARIES, 30th JUNE, 1957.

City.	Number of Volumes in—			Total.
	Reference Branch.	Ordinary Lending Branch.	Country Lending Branch.	
Canberra(a) .. .. .	520,000	..	(b)	520,000
Sydney .. .. .	(c) 527,588	(d)	(e) 161,743	689,331
Melbourne .. .. .	643,929	106,665	44,443	795,037
Brisbane .. .. .	171,987	..	..	171,987
Adelaide .. .. .	181,247	(f) 51,520	57,516	290,283
Perth .. .. .	278,000	..	..	278,000
Hobart .. .. .	53,570	(g) 142,221	92,381	288,172
Darwin .. .. .	550	..	(h) 21,550	22,100

(a) Commonwealth National Library, including Parliamentary Section. (b) Books are lent to libraries or students throughout Australia whenever necessary for research work. (c) Includes 162,102 volumes in the Mitchell Library and 12,000 volumes in the Dixon Library. (d) The maintenance and control of the ordinary lending branch of the Public Library at Sydney were transferred to the Municipal Council in 1908. In 1958, books in this library numbered 175,459. (e) Includes 2,069 volumes in the Model School Library. (f) Includes 14,916 volumes in the Children's Branch. (g) Includes 111,910 volumes in the Children's Branch. (h) Ordinary and Country Lending Branch and 1800 volumes in the Children's Branch.

(ii) *New South Wales.* The Free Library Movement in New South Wales, founded for the establishment of a system of public libraries on the basis suggested in the Munn-Pitt Report of 1935, helped to pave the way for the Library Act 1939, which was fully proclaimed as from 1st January, 1944. Of the 157 councils which have adopted the Library Act, 137 have put their adoption into effect. During 1957-58, they spent on their libraries £818,849, including £177,928 received in subsidy. There are 152 libraries of which 39 are in the metropolitan area and 113 in the country. There are also 12 bookmobiles, of which two are in Sydney, five in the suburbs of Sydney and five in country municipalities and shires. These libraries contain 1,653,948 volumes.

New South Wales departmental libraries are staffed by officers seconded from the State Library, which also provides a central cataloguing service for certain municipal and shire libraries constituted under the 1939 Act. The State Library manages the libraries of the University Tutorial Classes and the Workers' Educational Association.

The Country Circulation Department forwards books on loan to State schools, to municipal and shire libraries and to individual students. During 1957-58, 97,392 books were lent to small State schools, and 19,039 to country libraries, while 45,937 reference works were lent to individual country students and to libraries to satisfy special requests.

The State Library includes a general reference department of 353,486 volumes together with the Shakespeare Tercentenary Memorial Library, and the Mitchell and Dixon Libraries and Galleries which are mainly devoted to Australian and Pacific material. The Mitchell Library, of more than 60,000 volumes and pamphlets and 300 paintings, was bequeathed to the trustees of the Public Library in 1907 by Mr. D. S. Mitchell, together with an endowment of £70,000. There are now 162,000 volumes in the library, in addition to valuable manuscripts, maps and other material. In 1929, Sir William Dixon gave a collection of historical pictures then valued at £25,000. These were subsequently added to and, at his death in 1952, Sir William bequeathed the whole of his collection of books, manuscripts, pictures and other material together with an endowment of more than £113,000, mainly for the printing or reprinting of historical documents relating to Australia and the Pacific.

The State Library also takes care of the State archives.

Other important libraries in New South Wales are the Australian Museum, 32,000 volumes; Teachers' Colleges, 162,232; Technical Education Branch, 36,800; Railways Institute, 152,247; Government Transport Institute, 45,268; Cooper Library of the New South Wales Public School Teachers' Federation, 22,500; and the Library at the National Herbarium, 10,000 volumes. At 30th June, 1958, the Parliamentary Library contained 126,828 volumes.

(iii) *Victoria.* Until the establishment of the Free Library Service Board in 1947, the only public library facilities available in Victoria (apart from those of the State Public Library and one or two Metropolitan Municipal Libraries) were those offered by about 200 Mechanics' Institute Libraries situated in country areas all over the State. The Board's policy has been to replace these services with modern public libraries controlled by local Municipal Councils and subsidized by the Board. Since the Board's inception, 80 municipalities, comprising 1,567,340 of the State's population, have established libraries.

Of these, 20 are in the city, serving 1,051,863 people, and 60 in the country, serving 515,477 people. The amount of £221,851 was paid to the Councils in library subsidy for the year 1957-58 and a total of £432,000 was expended in Municipal Library Service for the same year. There are 851,878 books available to the communities in which libraries are established and combined circulation figures were 5,649,948 as at 30th September, 1957.

A feature of the services provided in the country is the number of co-operative or regional library groups now being developed. These services, of which there are fourteen, comprising a total of 43 Councils, consist of groups of Councils which pool their financial resources, book-stocks and trained staff, in order to provide more comprehensive, efficient library facilities.

Approximately 140 Mechanics' Institute Libraries are still in existence in country areas. In 1957, 62 of them shared a grant of £2,000.

(iv) *Queensland.* The Library Board of Queensland was established in 1945 under the provisions of the Libraries Act of 1943. Its duty is to attain the fullest co-operation and improvement of the library facilities of the State, with the object of placing such facilities on a sound basis for the benefit and educational improvement of the citizens generally. The Board consists of six members with the State Librarian as ex officio member and secretary.

One of the Board's functions is the control and management of the Public Library of Queensland. Its policy is to build up the main collection of the Library, being as it is the State's reference centre.

The Country Extension Service, which is accommodated at the Public Library of Queensland, lends books of non-fiction free to adults and children residing outside the metropolitan area and to municipal libraries in areas of low population.

The Oxley Memorial Library was established in 1923, and since 1946 has been administered as a department of the Public Library of Queensland and the collection has been kept segregated. Its object is to collect books, manuscripts, pamphlets and other graphic material relating to the history and literature of Australia and of Queensland in particular, and to provide facilities for research students in Queensland literature and history.

The holdings of the Public Library of Queensland and its extension services in 1957-58 were:—Main Reference Collection, 112,888 volumes and 5,227 maps and pamphlets; Country Extension Service, 51,778 volumes; Oxley Memorial Library, 19,033 volumes and 7,875 maps, pamphlets and miscellaneous items. Regarding library development throughout the State, the policy of the Library Board of Queensland is to encourage local authorities to conduct library services as a function of local government. In 1957-58, 45 local authorities were conducting 59 library services and 27 others indicated that they would do so in the near future. There were 34 libraries in Queensland free to adults and 46 free to children.

To help overcome the problems of large area and sparse population, various local authorities provide library services on a regional basis. By 30th June, 1958, three regional library services had been established:—the South Western (1 town and 6 shires), the Central Western (6 shires), and the North Western (6 shires) with head-quarters at Charleville, Barcardine and Mt. Isa respectively. Other regional services are being planned.

The Brisbane City Council has established eleven libraries of which nine have separate children's collections.

The library of the Parliament of Queensland was established in 1860. At 30th June, 1958, the library held 85,031 books and pamphlets, consisting of official publications and books devoted largely to history, the social sciences, biography and literature. The Libraries Act Amendment Act, 1949, provides for the Public Library and the Parliamentary Library each to receive a copy of all books, pamphlets, maps and other printed material published in Queensland.

(v) *South Australia.* In the reference department of the Public Library of South Australia, there are about 184,200 volumes, most of which may be borrowed. Over 3,000 periodicals are filed, and the collection of newspapers includes every newspaper printed in South Australia. There are 38,300 volumes in the lending department available to persons living in the metropolitan area, and the Country Lending Service has 63,160 volumes, of which more than half are suitable for children.

The Research Service specializes in scientific and technical inquiries, and supplements the resources of the Public Library by borrowing from other libraries and by obtaining microfilm copies of material not available locally. It has an extensive collection of trade catalogues.

The library of the Parliament of South Australia held approximately 65,000 volumes at 31st December, 1957.

The Institutes' Association in 1957 comprised 223 suburban and country libraries with 746,840 volumes.

(vi) *Western Australia.* In 1955, the Library Board of Western Australia was made responsible for all public library services throughout the State to which the State Government contributes funds.

The Board has the following major functions :—

- (a) To encourage local authorities throughout the State to establish public libraries and to provide as a State subsidy all books and bibliographical services necessary for such libraries when established ;
- (b) To administer for a limited period a former scheme of monetary grants of up to £50 per annum to local authorities which maintain public libraries ;
- (c) To administer the State Library ;
- (d) To advise the Government on all matters relating to libraries ;
- (e) To provide for the training of librarians.

Local public libraries are subsidized on a £1 for £1 basis, the local authority providing accommodation and staffing and the Board all books and related services. The Board provides at least one volume per head of the population. All books throughout the State are available at any library on request to the Board. All cataloguing is done by the Board. The first library under this scheme was opened in August, 1954. By 30th June, 1958, 30 libraries had been established.

Prior to the establishment of the Library Board, the government appointed a Country Free Lending Libraries Committee in 1944 to make small grants to local authorities for library purposes. That committee has now been merged with the Board. Its activities will cease in about 1962, and will be replaced by the full service of the Board.

The State Library, established in 1887, is the reference division of the Library Service of Western Australia. In addition to providing the normal facilities of a reference library for the metropolitan area, it extends its service throughout the State through local public libraries. It is divided into four subject departments as follows:

- J. S. Battye Library of West Australian History.
- Library of Business, Science and Technology.
- Library of Social Sciences, Philosophy and Religion.
- Library of Literature and the Arts.

The State Bibliographical Centre is housed at the State Library and there is also a Commercial Information Centre. The State archives are maintained by the State Library and managed by the staff of the Battye Library. The library is fully equipped with micro-film and photocopy apparatus.

The bookstock of the Board at 30th June, 1958, was approximately:

- Lending library services (including books in public libraries) : 80,000 volumes.
- State Library : 200,000 bound volumes.

The University of Western Australia, through its Adult Education Board, manages the Adult Education Library of some 12,000 volumes of general reading and fiction. Books are sent to country readers by post.

There are some 80 special libraries in government departments and industrial firms. A union catalogue of periodicals received in the libraries of all types in the metropolitan area has been published by the Library Board of Western Australia.

(vii) *Tasmania.* The Tasmanian Library Board, constituted in 1944, is responsible for administering the State library headquarters in Hobart, for the extension of library services throughout the State and for the control of State aid for libraries. State aid to municipalities is provided in the form of books of a value equal to the amount of library rates collected. The total cost of library services to the State during 1956–57 amounted to £95,162.

The Tasmanian Library Board provides lending and reference services for the people of Hobart and operates a reference service for people throughout the State. In addition, it conducts screenings of documentary films, recitals of recorded music, lectures, library weeks in country centres, puppetry demonstrations, etc.

The Parliamentary Library works in close collaboration with the State Library, which provides a reference officer to serve members during session. It catalogues all new books added to the library and supplies recreational reading.

4. *University Libraries.*—The libraries of the Australian universities provide material not only for the education of graduates and undergraduates, but also for scholars, research workers and practical investigators all over the continent. Much of the material they contain is not available elsewhere, for although in most cases smaller, they are in many directions more highly specialized than the public libraries. They lend to one another and to State and private institutions as well as to individual investigators. Each of them is governed by a librarian, who is responsible as a rule to an executive sub-committee and a committee which is practically co-extensive with the professional staff. In size, the library of the University of Sydney is the fourth library in Australia, and the libraries of the Universities of Melbourne and Adelaide are respectively eighth and ninth. The following

table shows the sizes and rates of growth and expenditure of the Australian university libraries; borrowing statistics are not shown, as they differ too widely to be comparable without considerable explanation.

## UNIVERSITY LIBRARIES, 1957.

University or College.	Volumes.	Accessions during year.	Expenditure.
			£
Australian National University .. .. .	129,787	8,313	47,763
Sydney .. .. .	403,265	16,568	68,065
Melbourne .. .. .	233,889	9,715	81,568
Queensland .. .. .	160,971	13,306	50,423
Adelaide .. .. .	221,893	9,557	53,399
Western Australia .. .. .	146,827	9,462	39,657
Tasmania .. .. .	95,000	5,000	29,984
New South Wales University of Technology	82,445	12,039	70,014
New England .. .. .	50,967	11,813	28,134
Canberra University College .. .. .	41,000	8,000	18,849
<b>Total .. .. .</b>	<b>1,566,044</b>	<b>103,773</b>	<b>487,856</b>

The library of the Australian National University was founded in 1948. At the end of 1958, stock comprised about 140,000 volumes, including a collection in oriental languages. The library is designed to serve the staff and students of a post-graduate institution but its resources are freely available to all serious readers. It specializes in the fields of the physical and medical sciences, excluding clinical works. In the social sciences, it aims to provide a good working collection while giving consideration to the holdings of the Commonwealth National Library. It possesses significant collections in anthropology, linguistics, mathematics and mathematical statistics.

The first books were bought for the library of the University of Sydney as early as 1851. Only since 1910, however, has it possessed a building of its own; previously it had been housed in the main building. It is named after the principal benefactor, Thomas Fisher, who, in 1885, bequeathed to it the sum of £30,000. It contains an up-to-date bookstack of glass and steel and a fine reading room in which, since the beginning of 1941, about 18,000 volumes of the collection have been made available on open access shelves. In addition, members of the teaching staff and certain classes of undergraduates are admitted to the bookstacks and all readers are encouraged to borrow freely. The library possesses a large number of periodicals, especially scientific, valuable collections of seventeenth-century pamphlets and Elizabethan translations from the classics, and an extensive collection of Australian literature. Besides medical and law branches, there are a number of departmental libraries. The total holding at the 30th June, 1958, was 411,345 volumes, including more than 15,000 books in Chinese acquired during the previous two years.

Early in 1854, the University of Melbourne made its first allocation for books, but the library was housed in temporary quarters for some time. In recent years, the university authorities have treated the library generously, and there have been some welcome benefactions, but in the past, accommodation for the library has never been adequate. The W. L. Baillieu Trust made available the first instalments of a £100,000 gift for building purposes, which have been followed by subsequent gifts and substantial grants from the State government, with the result that the new building, costing £750,000 and occupied at the beginning of 1959, is the first to be designed for library purposes and provides space for 100 readers and 300,000 books. Most of the books are accessible on open shelves, and though the library is intended primarily for reference purposes, borrowing, except of text-books and certain valuable volumes, is made as easy as possible. The resources of the library are also extensively used on inter-library loan by industries and other organizations throughout Australia. The library is administered from the centrally situated general library. There is a large medical branch library specially rich in periodicals, and smaller branch libraries in various other departments. At the end of 1957, it contained 233,889 volumes.

The library of the University of Queensland was founded in 1911. The main library is now in its own building in the new University at St. Lucia, and there are a considerable

number of departmental libraries. All books are in open access and most are available for borrowing. At 1st July, 1958, the library contained more than 168,000 volumes. The main library includes a special collection of material relating to the history, development and culture of the countries surrounding the Pacific Ocean.

The Adelaide University library bears the title of its original benefactor, Robert Barr Smith, who, with members of his family in and after 1892, gave the university about £50,000 for the library. Some 25,000 volumes are shelved in the reading room and are available to the ordinary student. Up-to-date steel bookstacks hold about 150,000 volumes. Borrowing facilities are available to all matriculated students, to country students and to graduates. There are departmental libraries for medicine, law and music. The British Medical Association (South Australian Branch) makes an annual contribution towards the maintenance of the medical library. In return, all its members enjoy borrowing privileges.

In the University of Western Australia, the first permanent library staff was not appointed until 1927. Provision for a permanent library was not possible when the university moved to its present site, and space and facilities have consequently been inadequate. The whole collection, consisting of about 150,000 volumes, is accessible on open shelves. There are a Law Library, a Medical Library, a number of departmental libraries, and a bindery. The library possesses a good range of periodicals, especially legal and scientific and is building up a useful collection of Australian literature.

Although the library of the University of Tasmania was founded in 1893, a full-time librarian was appointed for the first time at the end of 1945. From 1945 to 1956, the book stock almost doubled and now stands at approximately 100,000 volumes. The library received about 2,000 periodicals in 1957. Since 1954, a Hobart Union List of Serials has been housed in and kept up to date by the university library, thus providing a major reference tool for all bibliographic inquiries in the State.

The New England University library was founded in 1938, and bears the name of its benefactor, Sir William Dixon. At the end of 1957, it contained 51,648 volumes, mainly on open shelves. In 1957, the library moved to its new temporary quarters which can hold approximately 65,000 volumes in open access and seat 100 readers. Two basement areas are being developed to accommodate a bindery and a stack room for local records and additional books and periodicals. Microfilm and microcard readers are available.

The University of New South Wales made its first allocation for books and periodicals in 1950, the publications being incorporated in the Library of the Sydney Technical College. In 1951, publications relating to professional diploma courses were transferred to the university but remained in the libraries of the Technical College where these courses were being conducted. Of the 82,450 volumes in the university's library at December 1957, 18,930 were in the university's library at Kensington, 25,140 in the library of the Newcastle University College, and the rest in the Technical College libraries. The university library is administered through a central unit at the Sydney Technical College Library which maintains a central catalogue of the holdings of all libraries other than that of the Newcastle University College. The university library is strong in current scientific and technical periodicals. Borrowing facilities are available to all students.

The Canberra University College library was established in 1938. In 1958, it contained 45,000 volumes, which are on open shelves.

5. Children's Libraries and School Libraries.—(i) *New South Wales*. Children's libraries are being developed as departments of municipal and shire libraries. The Education Department maintains a school library service for the fostering of State school libraries, which are maintained partly by parents' and citizens' associations and partly by departmental subsidy. Secondary and central schools have trained teacher librarians.

(ii) *Victoria*. Under the auspices of the Free Library Service Board, 80 municipal children's libraries have been, or are in the process of being, established as part of the library services provided by the councils concerned. All these libraries provide comprehensive modern children's book collections which are constantly being refreshed. An annual grant of £5,000, which is additional to the ordinary annual municipal library grant, is provided to assist these libraries. In addition, seven independently controlled children's libraries shared in this grant in 1958.

The Education Department is making provision for the building of a library room in new schools. Where accommodation is available in existing schools, library furniture is provided free of cost to the schools and the government subsidises the purchase of books. In December, 1957, 270 schools had central libraries.

A scheme of circulating libraries for small schools, particularly in remote areas, has been operating for some years. Four hundred and forty-five schools benefited from this scheme in 1957.

The Department has a Library Service Officer with a small staff to advise and assist schools in the establishment and organization of libraries. A one-year course for the training of teacher-librarians was established at Melbourne Teachers' College in 1955. Approximately 20 teachers are trained each year.

(iii) *Queensland.* The purchase of books in State school libraries in Queensland is financed by school committees and parents' associations, with a subsidy from the Department of Education on a £1 for £1 basis. Teachers are given short courses in school library organization at the public library in Brisbane.

(iv) *South Australia.* A Children's Library of 14,620 volumes is used by school classes and individual children living in the metropolitan area. Except for works of reference, all books are available for loan. In August, 1957, a Youth Lending Service was opened for adolescents from 13 to 18 years of age. It has a stock of 4,160 volumes.

(v) *Western Australia.* The State Education Department makes library subsidies and grants to government schools.

All high schools are provided with a library room and furniture, and trained teacher-librarians are appointed to them. Building plans do not provide for primary school libraries, but a number of the schools have set up central libraries when rooms have become available.

One-teacher and two-teacher schools are served by the Charles Hadley travelling library and the Small Schools Fixed Library services. Under the Fixed Library Scheme, permanent libraries of reference books and encyclopaedias were placed in each such school. Books to the value of £15 were added to each of these libraries annually from 1948 to 1954. Since then the grant for these books is made at three year intervals. The Hadley library provides recreational reading and operates 350 boxes which are exchanged every three months. The government grants £500 per annum for this service, and the participating schools contribute the commission received from the Commonwealth Savings Bank for the teachers' services—about £170.

Children in isolated areas who are unable to attend school are catered for by books sent out by the State Correspondence School's Library. The children are kept in touch with the library by means of radio talks and leaflets issued periodically.

(vi) *Tasmania.* The Lady Clark Memorial Children's Libraries, at the State Library, Hobart, aim to serve all children in Tasmania with books. At 30th June, 1957, 197 children's libraries and depots had been established.

Practically all State secondary schools in Tasmania have libraries, with full-time librarians in four of them. A Schools' Library Service gives a book service to schools and assists schools wishing to set up their own libraries. In 1957, the number of schools receiving service was 112 and the number of books issued was 10,170.

6. *Special Libraries.*—Before the 1939–45 War, the number of special libraries, apart from those maintained by government departments, was small, but during recent years many manufacturing, commercial, research and other firms, as well as statutory bodies, have found it necessary to establish special libraries to serve their specialist or other staff. These libraries, which are most numerous in Sydney and Melbourne, are being increasingly staffed by trained librarians.

7. *Microfilms.*—The following libraries supply microfilm or photostat copies of material usually at a small charge (the letter "P" signifies photostat supplied and "M" microfilm supplied):—*Australian Capital Territory*—Australian War Memorial (P), Commonwealth National Library (PM), C.S.I.R.O. (M); *New South Wales*—Metropolitan Water, Sewerage and Drainage Board (P), Public Library of New South Wales (M), Standards Association of Australia (P), School of Public Health and Tropical Medicine (M), Fisher Library, University of Sydney (PM); *Victoria*—Commonwealth Serum Laboratories (P), Technical Information Section, Munitions Supply Laboratories (PM), Public Library of Victoria (M), Standards Association of Australia (Melbourne Branch) (P), University of Melbourne (PM), C.S.I.R.O. (M); *Queensland*—Public Library (P); *South Australia*—Public Library of South Australia (PM), University of Adelaide (PM), Waite Agricultural Research Institute (P); *Western Australia*—State Library (PM); *Tasmania*—University of Tasmania (PM).

## § 11. Public Museums.

The Australian Museum in Sydney, founded in 1836, is the oldest museum in Australia. In addition to possessing fine collections of Australian fauna, the museum contains valuable anthropological and mineral collections. The number of visitors to the institution during 1956–57 was 295,600 and the average attendance on week-days 720, and on Sundays, 1,330.

The expenditure for 1956-57 amounted to £70,150. A valuable library containing 32,000 volumes is attached to the museum. Courses of evening popular lectures are delivered and lecturers also visit distant suburbs and country districts, and afternoon lectures for school children are provided; 10,300 children attended during 1956-57. Representative collections illustrative of the natural wealth of the country are to be found in the Agricultural and Forestry Museum and the Mining and Geological Museum. The latter institution prepares collections of specimens to be used as teaching aids to country schools. The "Nicholson" Museum of Antiquities, the "Macleay" Museum of Natural History and the Museum of Normal and Morbid Anatomy attached to the University of Sydney, and the National Herbarium and Botanical Museum at the Sydney Botanic Gardens, are all accessible to the public. There is a Museum of Applied Arts and Sciences in Sydney with branches in three country centres. Expenditure during the year 1956-57 was £52,369. Valuable research work is being performed by the scientific staff in connexion with oil and other products of the eucalyptus and the gums, kinos, tanning materials, and other economic products of native vegetation generally.

The National Museum at Melbourne, devoted to natural history, geology and ethnology is in the eastern section of the Public Library Building. The Museum of Applied Science, also housed under the same roof, contained at 30th June, 1957, 24,250 exhibits which covered applied and economic aspects of all branches of science. There is a fine Museum of Botany and Plant Products in the Melbourne Botanic Gardens. In addition to the large collection in the geological museum attached to the Mines Department in Melbourne, well-equipped museums of mining and geological specimens are established in connexion with the School of Mines in the chief mining districts.

The Queensland Museum, founded in 1855, comprises exhibited and reference collections of zoology, geology and ethnology. It is maintained entirely by the State Government. Expenditure for the year 1956-57 was £30,000. The collections are principally Australian but there is an excellent series of ethnological material formed by Sir William McGregor in New Guinea.

The South Australian Museum has considerable collections of most branches of natural history. In 1957-58, there were at least 200,000 visitors and expenditure was £46,803.

The Western Australian Museum was established in 1895. It is under the statutory management of a Board of Trustees, appointed by the State Government, but operates under its own director and staff. Although it is primarily a museum of natural history, with principal research interests in the fauna of Western Australia and the ethnology of the Western Australian aborigine, the museum has also historical and technological exhibits.

The Education Department of Western Australia has two teachers attached to the Museum. One of these gives instruction to visiting classes from schools in the metropolitan area and the other acts in an advisory capacity to teachers in country schools. In 1957-58, 8,700 school children visited the Museum.

A close relationship exists between the museum and the Geological Survey of Western Australia, the collections of the survey being housed and exhibited in the museum.

There are two museums in Tasmania—the Tasmanian Museum at Hobart, and the Victoria Museum and Art Gallery at Launceston—both of which contain valuable collections of botanical, mineral and miscellaneous products. The museums received aid from the Government during 1956-57 to the extent of £24,050.

## § 12. Public Art Galleries.

The National Art Gallery of New South Wales originated in the Academy of Art founded in 1871. The expenditure for 1956-57 was £33,684. At the end of 1957, its contents comprised 1,419 oil paintings, 904 water colours, 2,175 prints and drawings, 287 sculptures and casts, and 1,330 ceramics, works in metal and miscellaneous. Since 1895, loan collections of pictures have been exhibited regularly in important country towns.

The National Gallery at Melbourne at 30th June, 1957, contained 1,087 oil paintings, 7,600 objects of statuary, bronzes, ceramics, etc., and 8,048 water colour drawings, engravings and photographs. The Gallery is situated in the same building as the Museum and Public Library. Expenditure allocated to the National Gallery in 1956-57 was £67,327, including £3,125 for purchases of works of art. Several munificent bequests have been made to the institution by private citizens. There are provincial art galleries at Ararat, Ballarat, Bendigo, Castlemaine, Geelong, Mildura, Shepparton, St. Arnaud and Warrnambool, to which, periodically, pictures are sent on loan from the National Gallery.

The Queensland National Art Gallery, Brisbane, maintained by the State Government, was founded in 1895. The first Director was appointed in 1950, and the interior of the gallery has been remodelled. An art museum and a print room have been added. The collection comprises mainly Australian paintings, etc.

The Art Gallery at Adelaide originated in an exhibition of pictures in the Public Library Building in 1882. Many bequests made by private citizens have materially assisted its growth. At 30th June, 1958, there were in the Gallery 1,801 paintings in oil, water colours and pastels, 129 items of statuary and a large collection of drawings, prints and furniture. The expenditure during 1957-58 was £28,333.

The Art Gallery of Western Australia was established in 1895. Although under the statutory management of a Board of Trustees, appointed by the State Government, it functions under its own director and staff. At the 30th June, 1958, the collection comprised 332 oil paintings, 169 water colours, 10 pastels, 776 drawings, 509 prints, 9 miniatures and 19 pieces of sculpture. International and interstate exhibitions are frequently held and travelling exhibitions are sent to country centres.

In Tasmania, the Art Gallery at Hobart was opened in 1887. In June, 1957, the contents consisted of 177 oil paintings, 180 water colours, 119 black and white, three statuary and 151 etchings, engravings, etc. Expenditure in 1956-57 was £21,752.

The Art Gallery at Launceston was opened in 1891. Only a small proportion of the contents belongs to the gallery, the bulk of the pictures being obtained on loan. In June, 1957, there were on view 194 oil paintings, 116 water colours, 30 black and white, and 64 miscellaneous exhibits. Expenditure in 1956-57 was £11,438.

### § 13. Scientific Societies.

1. **Royal Societies.**—In earlier issues of the Official Year Book, an outline was given of the origin and progress of the Royal Society in each State. The accompanying table contains the latest available statistical information regarding these institutions, the headquarters of which are in the capital cities.

#### ROYAL SOCIETIES, 1956.

Particulars.	Sydney.	Mel- bourne.	Bris- bane.	Ade- laide.	Perth	Hobart.	Can- berra.
Year of foundation .. ..	1866	1854	1884	1880	1914	1843	1930
Number of members .. ..	331	263	224	179	157	486	176
Volumes of transactions issued .. ..	91	(a) 750	68	82	40	91	..
Number of books in library .. ..	40,000	23,000	49,311	20,100	5,300	31,340	..
Societies on exchange list .. ..	376	303	283	235	210	295	..
Income .. ..	£ 3,501	2,373	364	2,626	346	1,645	96
Expenditure .. ..	£ 3,536	1,513	313	2,152	541	1,611	69

(a) Proceedings.

2. **The Australian Academy of Science.**—The Australian Academy of Science was founded in 1954 to promote scientific knowledge, to maintain standards of scientific endeavour and achievement in the natural sciences in Australia, and to represent Australian science in the international field. These objectives it shares with the Royal Society of London and with the National Academies of Science of most other countries.

Prior to 1954 Australian science had been represented in international activities by the Australian National Research Council. This Council, which was formed in 1919, particularly to provide for Australia's participation in the International Research Council, acted for many years as the top representative body of science in Australia. Over the years the National Research Council had widened its membership to include leaders in the social sciences as well as in the natural sciences. By 1951, there was a strong feeling that the natural sciences needed a body of men, distinguished in their respective fields, to foster the pursuit of the natural sciences in Australia, and to represent Australia in the increasing international activities. The social scientists were also ready to form a separate organization now known as the Social Sciences Research Council.

The Australian National Research Council agreed to the suggestion that two entirely new bodies should be formed and that the old Research Council should be disbanded. The initiative in the natural sciences was taken by a group of twelve Fellows of the Royal Society

of London, resident in Australia, who invited eleven other scientists of high standing to join them. These scientists became the Foundation Fellows of the Australian Academy of Science. With the help of the Australian Government and the Royal Society of London, the group of founders obtained a Royal Charter which established the Australian Academy of Science as a body with proper legal status and adequate prestige. During the Royal Visit, Her Majesty Queen Elizabeth II was graciously pleased to present her Charter to the provisional Council of the Academy at a simple ceremony at Government House, Canberra, on 16th February, 1954, thus following the precedent of King Charles II who presented his Charter to the Royal Society of London in 1662.

The Charter required that the Academy should be enlarged to at least 50 Fellows within three months. Six Fellows, distinguished for their achievements in the natural sciences, are elected annually. The total Fellowship is now 81.

The first task of the Academy was to take over from the National Research Council Australia's representation in international scientific affairs. An early duty was the organization of Australia's participation in the International Geophysical Year and as an indication of the confidence in the young Academy the necessary grant from the Australian Government was obtained. The co-ordination of Australia's scientific resources for the International Geophysical Year was placed in the hands of a National Committee and carried out on an honorary part-time basis.

The publication policy adopted is to support existing worthy publications rather than to enter the field actively for the present. Several grants have been made to learned journals conducted by reputable Australia-wide societies, and an agreement has been concluded with the Commonwealth Scientific and Industrial Research Organization for the control of the standard of the Australian Journals of Scientific Research published by the Organization. The only regular publication of the Academy is a Year Book.

Other assistance to scientific research has taken the form of grants for a number of projects—for several symposia and for the support of two biological research stations, one on the Great Barrier Reef and one in Western Australia.

The Royal Charter sets out as one of the Academy's objects "to suggest ways in which scientific projects in Australia may be instituted, carried out, or revised", and there are several matters of national scientific importance which have engaged the attention of the Council and expert committees over the last few years. The sciences of oceanography and hydrology, both of considerable practical significance to Australia, have hitherto been somewhat neglected and certain recommendations have been made to alleviate this position. The question of scientific manpower to supply the needs of the nation has given grave concern here as in other countries. Specific recommendations have also been made to the Government on this matter. A report has been published on the deterioration of the high mountain water catchments of New South Wales and Victoria—an area of vital importance where the huge Snowy Mountains hydro-electric scheme is being built.

The affairs of the Academy are managed by an elected Council consisting of the President, the Treasurer, two Secretaries (one representing the Physical and the other the Biological Sciences) and eight other members. The Assistant Secretary (who must not be a Fellow) is the Academy's salaried administrative officer.

The headquarters of the Academy is situated in Gordon Street, Canberra City. This building, which is of unconventional design, houses the offices of the Academy and provides a conference centre of international standard for scientific and other meetings.

**3. The Australian and New Zealand Association for the Advancement of Science.**—This association was founded in 1887. Its headquarters are at Science House, Gloucester Street, Sydney, and congresses are held at intervals of approximately eighteen months within the various States and in the Dominion of New Zealand. The next congress is scheduled to take place in Perth in August, 1959.

**4. Other Scientific Bodies.**—A number of scientific bodies have been set up by the Commonwealth Government. These are the Commonwealth Scientific and Industrial Research Organization, the Commonwealth Observatory (which has now been incorporated in the Australian National University), the Ionospheric Prediction Service, and the Atomic Energy Commission. Particulars concerning these bodies may be found in Chapter XXX.—Miscellaneous.

The Linnean Society of New South Wales, with head-quarters in Sydney, was founded in 1874. Sir William Macleay, who died in 1891, during his lifetime and by his will endowed the Society to the amount of £67,000, which has been increased by investment to approximately £100,000. The Society offers annually to graduates of the University of Sydney

who are members of the Society and resident in New South Wales, research fellowships (Linnean Macleay Fellowships) in various branches of natural history. One fellowship was awarded in 1958. The library comprises some 18,000 volumes. Eighty-three volumes of Proceedings have been issued, and the Society exchanges with about 300 kindred institutions and universities throughout the world. The membership at the end of 1958 was 260.

The British Astronomical Society has a branch in Sydney, and in each of the States the British Medical Association has a branch.

In addition to the societies enumerated above, there are various others in each State devoted to branches of scientific investigation.

#### § 14. State Government Expenditure on Education, Science and Art.

The expenditure by each State Government on education, science and art during the year 1956-57 is shown in the following table. Owing to the details not being available in all States, the figures exclude officers' pensions and superannuation, pay-roll tax, and interest and sinking fund on capital expended on buildings. The cost of the medical and dental inspection of school children is also excluded, as this service is more appropriately classified under public health.

##### STATE EXPENDITURE ON EDUCATION, SCIENCE AND ART, 1956-57.

(£'000.)

State.	Expenditure from—				Receipts.	Net Expenditure.
	Revenue.	Loan.	Other Funds.	Total.		
New South Wales ..	37,835	7,453	..	45,288	908	44,380
Victoria ..	26,105	7,446	..	33,551	326	33,225
Queensland ..	11,616	1,814	370	13,800	503	13,297
South Australia ..	8,669	1,640	..	10,309	436	9,873
Western Australia ..	8,126	1,589	20	9,735	142	9,593
Tasmania ..	4,278	1,138	27	5,443	97	5,346
<b>Total ..</b>	<b>96,629</b>	<b>21,080</b>	<b>417</b>	<b>118,126</b>	<b>2,412</b>	<b>115,714</b>

## CHAPTER XVI.

### PUBLIC JUSTICE.

NOTE.—In interpreting statistics of public justice, it should be realized that a number of factors affect comparability from State to State and from year to year, e.g.:

- (a) Differences in the jurisdiction of courts;
- (b) Changes in the law in particular States and differences in the laws between States;
- (c) The methods of compilation of the figures (e.g. *see* footnotes to the tables dealing with convictions);
- (d) The attitude to laws such as those connected with liquor, vagrancy, gaming, and traffic offences;
- (e) The strength and distribution of the police force;
- (f) The proportion of various types of crimes reported and solved.

#### § 1. The Australian Legal System.

1. **General.**—Australia, being a federation, has two systems of courts—State and federal. The only federal courts are the High Court of Australia, the Federal Court of Bankruptcy and the Commonwealth Industrial Court. Otherwise, federal jurisdiction is vested in the State courts.

Thus, while the High Court has extensive original jurisdiction, most civil cases involving federal jurisdiction are heard in the State courts. Almost all criminal matters involving federal jurisdiction are tried in State courts. In the tables in this chapter which give statistics of proceedings in State courts, no distinction has been drawn between State cases proper and cases where State courts are exercising federal jurisdiction.

2. **State Courts.**—(i) *Civil jurisdiction.* Lower courts (which term includes, for the purposes of this chapter, Magistrates' Courts, Courts of Petty Sessions, and Small Debts Courts) are presided over by a stipendiary or police magistrate. In some limited instances, justices of the peace may exercise the jurisdiction of the court. The powers of the magistrates in the various States and Territories are set out in § 2 below. In most cases, unless the amount involved is very small, appeal may be made to a higher court against a magistrate's decision. In any case, the Supreme Court has a supervisory power, by means of prerogative writs, to examine whether a lower court has properly exercised its jurisdiction.

In the higher courts (which term includes, for the purposes of this chapter, District Courts, County Courts, and the Supreme Courts), actions are usually tried by a single judge, sitting with or without a jury, from whose judgment appeal lies to the full bench of the Supreme Court. In certain cases, the appeal can be carried to the High Court of Australia. Appeals to the Privy Council are discussed below.

(ii) *Criminal jurisdiction.*—Criminal courts are of two kinds, namely, courts of summary jurisdiction, usually called Courts of Petty Sessions, which may deal summarily with minor offences, and higher courts, known as Courts of Sessions, Quarter Sessions or General Sessions, and the Supreme Court, which hear indictable offences. A court of summary jurisdiction consists of a stipendiary or police magistrate, or two or more justices of the peace; a higher court consists of a judge or chairman, sitting with a jury. The jury finds as to the facts of the case and the judge determines the applicable law.

In the case of other than minor offences, a preliminary hearing is held before a stipendiary magistrate or justice of the peace for the purpose of determining whether a *prima facie* case has been made out. If the magistrate or justice of the peace finds that there is a case to answer, the person charged is committed for trial at a higher court. A magistrate or justice of the peace has power to release on bail.

There is an appeal to a higher court from the decision of a court of summary jurisdiction hearing a minor offence, and an appeal from a higher court to the full bench of the Supreme Court, or Court of Criminal Appeal. A further appeal may, with leave, be brought to the High Court of Australia.

3. **Federal Courts.**—The judicial power of the Commonwealth is vested in the High Court of Australia (the Federal Supreme Court), in the Federal courts created by Parliament (the Federal Court of Bankruptcy and the Commonwealth Industrial Court), and in the State courts invested by Parliament with Federal jurisdiction, both civil and criminal. Further particulars regarding the judicial power of the Commonwealth will be found in Chapter III. (§§ 71–73) of the Commonwealth Constitution (*see* p. 16 of this Year Book).

Particulars concerning the Federal Court of Bankruptcy, the High Court of Australia and the Commonwealth Industrial Court will be found in paragraphs 3, 4 and 5 respectively of § 3B of this chapter.

4. **Appeal to the Privy Council.**—There is an appeal, by special leave of the Privy Council, from the High Court to the Privy Council. In certain important types of constitutional disputes, involving questions of the powers of the Commonwealth *vis-à-vis* the States, a certificate of the High Court in effect granting leave to appeal is necessary. There is also an appeal from the State Supreme Courts direct to the Privy Council.

## § 2. Criminal Courts.

### A. LOWER (MAGISTRATES') COURTS.

1. **Powers of the Magistrates.**—(i) *New South Wales.* There is no general limit to the powers of the magistrates with regard to offences punishable summarily, their authority depending in each case on the statute which creates the offence and gives them jurisdiction. Except in the case of a very few statutes, and excluding cumulative sentences, the power of sentence is limited to twelve months. Imprisonment in default of fine is regulated by a scale limiting the maximum period according to the sum ordered to be paid, but in no case exceeding twelve months. Actions for debt and damage within certain limits also come within magisterial jurisdiction. In cases of liquidated debts, and damages whether liquidated or unliquidated, the amount is limited to £50 before a court constituted by a stipendiary magistrate. Magistrates have power to entertain claims of up to £250 under the Hire Purchase Agreements Act. The amount in actions of debt before two or more justices of the peace is limited to £30 and in actions of damage it is limited to £10, but may extend to £30 with the consent of the defendant. Outside the Metropolitan Area of Sydney and certain other prescribed districts one justice of the peace may hear cases of debt, liquidated or unliquidated, or damage up to £5 or to £30 by consent of parties.

(ii) *Victoria.* The civil jurisdiction of magistrates is restricted to what may be designated ordinary debts, damages for assault, restitution of goods, etc., where the amount in dispute does not exceed £100, and to actions arising out of torts or contracts to the extent of £250. No definite limit is fixed to the powers of the magistrates on the criminal side, and for some offences, sentences of up to two years' imprisonment may be imposed. The proportion of long sentences is, however, comparatively small.

(iii) *Queensland.* Generally speaking, the maximum term of imprisonment which justices can inflict is six months, but in certain exceptional cases, such as offences against sections 233, 344 and 445 of the Criminal Code (betting houses, aggravated assaults, and unlawfully using animals), sentences of twelve months may be imposed.

There is provision for applying cumulative sentences, but in practice not more than one sentence is generally made cumulative on a previous sentence.

(iv) *South Australia.* The power of special magistrates to impose fine and imprisonment is defined by the special Act creating the offence and conferring jurisdiction. In the case of minor indictable offences which are tried summarily, a maximum penalty of £100 fine or two years' imprisonment is fixed by the Justices Act 1921–1957. Magistrates also have power to hear certain civil actions in which the amount claimed is less than £1,250.

(v) *Western Australia.* The powers of magistrates and justices with regard to offences which are tried summarily are governed by the Act creating the offence and giving them jurisdiction. Imprisonment in default of payment of a fine is regulated by a scale limiting the period according to the amount of the fine but not to exceed six months.

The civil jurisdiction of magistrates and courts is restricted in general to £500. By consent of the parties, any action that might be brought in the Supreme Court may be dealt with in a Local Court. Justices may act in the case of illness or absence of the magistrate.

Magistrates are coroners and justices may be appointed as acting coroners.

Magistrates have appellate jurisdiction under some statutes and in country districts act as Chairmen of the Courts of Session. They may be appointed as Commissioners of the Supreme Court. On the goldfields, the magistrate is also the warden.

(vi) *Tasmania.* Magistrates are empowered to hear and determine in Courts of Petty Sessions all offences when an enactment expressly or by implication provides that the matter is to be determined summarily, or by or before justices, or that any offence is to be punishable upon summary conviction. In addition, stealing and analogous crimes may be heard and determined summarily on the election of the person charged, when the amount involved does not exceed £100.

No general limit is fixed in respect of sentences, the statute creating the offence almost invariably laying down the penalty. Where this is not the case, the Contravention of Statutes Act 1889 provides that a fine of £50 may be imposed. Sentences of imprisonment which justices may impose vary with the nature of the offence, with a maximum of two years. The aggregate of terms of cumulative sentences may not exceed two years.

The civil jurisdiction of magistrates is divided into two categories. A Commissioner of the Court of Requests, provided he is a legal practitioner, may hear actions for the recovery

of debts and damages not exceeding £250. As Commissioners are invariably police magistrates, this jurisdiction is State-wide. Courts of General Sessions, constituted by at least two justices, exercise similar powers, but the jurisdiction cannot exceed £50. Only one court, that at Currie, King Island, has the maximum jurisdiction, the others being limited to £30.

(vii) *Northern Territory.* Magistrates constituting courts of summary jurisdiction try offences punishable summarily. The punishment that may be imposed depends on the law creating the offence. Where there is no magistrate available the offence may be tried by two or more justices of the peace or, if all parties consent, by one justice. Proceedings for committal on indictable offences may be heard by either a magistrate or a justice of the peace. Certain minor indictable offences may be tried summarily by a magistrate or two justices of the peace who may impose a fine up to £100 or two years' imprisonment.

A stipendiary magistrate constituting a local court has a civil jurisdiction to hear and determine claims for not more than £1,000. A local court constituted by two justices of the peace has a civil jurisdiction to hear claims up to £50.

(viii) *Australian Capital Territory.* Magistrates have jurisdiction to try an offence which is punishable summarily and also where a person is made liable to a penalty or punishment and no other provision is made for trial. The punishment depends upon the statute which creates the offence. Certain indictable offences of a less serious nature may be tried summarily by a magistrate, who may impose a fine of £50 or imprisonment for one year. Magistrates also hear proceedings for committal on indictable offences. The stipendiary magistrate is also the coroner. In civil proceedings, magistrates try actions for amounts up to £200. Justices of the peace have no judicial functions.

2. *Cases Tried.*—The total numbers of cases tried at magistrates' courts in each State for the years 1953 to 1957 are shown in the following table:—

#### CASES TRIED AT MAGISTRATES' COURTS.

State or Territory.	1953.	1954.	1955.	1956.	1957.
New South Wales ..	276,566	(a) 271,105	(a) 254,487	(a) 271,172	(a) 307,824
Victoria ..	134,912	135,409	149,296	175,899	224,015
Queensland(b) ..	44,868	46,482	49,372	47,072	53,611
South Australia(b) ..	33,688	28,757	32,593	31,799	34,399
Western Australia ..	43,495	50,640	67,739	(c) 62,753	(c) 59,205
Tasmania ..	20,381	19,814	19,672	19,274	19,120
Northern Territory(b) ..	1,657	2,077	2,105	2,779	2,615
Australian Capital Territory ..	1,294	1,406	1,480	1,564	1,875
<b>Australia .. ..</b>	<b>556,861</b>	<b>555,690</b>	<b>576,744</b>	<b>612,312</b>	<b>702,664</b>

(a) In addition the following numbers of parking offences were settled by payment of fines to the Police Department, without court appearances: 1954—23,177; 1955—61,179; 1956—163,921; 1957—237,811. Cases of parking offences tried in 1953 are included in the total shown. (b) Twelve months ended 30th June of year shown. (c) In addition the following number of fines for minor traffic offences were paid to Crown Law Departments: 1956—32,130; 1957—31,405.

3. *Convictions at Magistrates' Courts.*—Of the persons who appeared before Magistrates' Courts in 1957, the following table shows the number who were convicted in each State.

#### CONVICTIONS AT MAGISTRATES' COURTS, 1957.

Class of Offence.	N.S.W.	Vic.	Qld. (a)(b)	S.A. (a)	W.A.	Tas.	N.T. (a)	A.C.T.	Aust.
Against the Person ..	3,587	1,242	441	297	392	280	83	51	6,373
Against Property ..	19,638	7,684	3,638	1,999	4,813	1,454	141	244	39,611
Forgery and Offences against the Currency ..	285	41	2	2	4	4	23	..	355
Against Good Order ..	106,121	33,676	26,047	6,194	7,149	1,702	1,712	385	182,986
Other ..	152,858	165,482	21,987	22,166	43,943	13,600	381	917	421,334
<b>Total .. ..</b>	<b>282,489</b>	<b>208,125</b>	<b>52,113</b>	<b>30,658</b>	<b>56,297</b>	<b>17,040</b>	<b>2,340</b>	<b>1,597</b>	<b>650,659</b>

(a) Year ended 30th June. (b) A person convicted on several counts at the one hearing appears only once, but if a person be convicted at different hearings during the year, whether for the same or for a different type of offence, the results of all hearings are recorded separately.

The following table shows the number of convictions in each year from 1953 to 1957:—

### CONVICTIONS AT MAGISTRATES' COURTS.

State or Territory.	1953.	1954.	1955.	1956.	1957.
New South Wales ..	257,522	(a) 250,019	(a) 233,777	(a) 249,131	(a) 282,489
Victoria ..	121,497	121,919	133,575	158,869	208,125
Queensland(b)(c) ..	41,266	42,590	46,242	45,711	52,113
South Australia(b) ..	30,229	25,482	29,264	28,221	30,658
Western Australia ..	40,643	48,005	65,118	(a) 59,883	(a) 56,297
Tasmania ..	17,705	17,299	17,314	17,029	17,040
Northern Territory(b) ..	1,411	1,915	1,864	2,444	2,340
Australian Capital Territory ..	1,141	1,128	1,285	1,209	1,597
<b>Australia .. ..</b>	<b>511,414</b>	<b>508,357</b>	<b>528,439</b>	<b>562,497</b>	<b>650,659</b>

(a) See footnotes (a) and (c) to table on p. 613.

(b) Twelve months ended 30th June of year shown.

(c) A person convicted on several counts at the one hearing appears only once, but if a person be convicted at different hearings during the year, whether for the same or for a different type of offence, the results of all hearings are recorded separately.

4. Convictions for Serious Crime at Magistrates' Courts.—(i) *General.* The figures given in the preceding tables refer to all convictions, and include offences of a technical nature, drunkenness, and minor breaches of good order, which, if they can be said to come under the heading of crime at all, at least do so in a very different sense from the more serious offences. The following table has therefore been prepared to show convictions at Magistrates' Courts for what may be regarded as the more serious offences, i.e. offences against the person, offences against property, forgery and offences against the currency.

(ii) *Number and Rates.* The following table shows the number of convictions for serious crime at Magistrates' Courts for the years 1953 to 1957:—

### CONVICTIONS FOR SERIOUS(a) CRIME AT MAGISTRATES' COURTS.

State or Territory.	1953.	1954.	1955.	1956.	1957.
New South Wales .. ..	17,612	17,085	19,803	21,399	23,510
Victoria .. ..	6,905	7,471	7,318	8,504	8,926
Queensland(b)(c) .. ..	2,916	3,226	3,546	3,942	4,079
South Australia(b) .. ..	1,945	1,744	1,867	1,889	2,298
Western Australia .. ..	3,632	4,241	4,368	5,289	5,205
Tasmania .. ..	1,185	898	1,127	1,176	1,738
Northern Territory(b) ..	149	195	177	115	247
Australian Capital Territory ..	53	231	138	102	295
<b>Australia .. ..</b>	<b>34,397</b>	<b>35,091</b>	<b>38,344</b>	<b>42,416</b>	<b>46,298</b>

(a) Offences against the person, offences against property, forgery and offences against the currency.

(b) Twelve months ended 30th June of year shown. (c) A person convicted on several counts at the one hearing appears only once, but if a person be convicted at different hearings during the year, whether for the same or for a different type of offence, the results of all hearings are recorded separately.

The number of convictions for serious crime at Magistrates' Courts per 10,000 of population for the same series of years is shown in the following table:—

**CONVICTIONS FOR SERIOUS CRIME AT MAGISTRATES' COURTS.**  
(PER 10,000 OF POPULATION.)

State or Territory.	1953.	1954.	1955.	1956.	1957.
New South Wales .. ..	52.0	49.8	56.7	60.2	64.9
Victoria .. .. .	28.8	30.5	29.0	32.7	33.4
Queensland(a) .. ..	22.9	24.8	26.8	29.1	29.5
South Australia(a) ..	25.4	22.2	23.1	22.6	26.7
Western Australia ..	58.5	66.3	66.3	78.1	75.2
Tasmania .. .. .	38.7	28.9	35.6	36.5	41.7
Northern Territory(a)	97.8	122.4	107.0	65.8	134.7
Australian Capital Territory ..	18.5	76.0	42.6	49.4	78.3
<b>Australia .. .. .</b>	<b>39.1</b>	<b>39.1</b>	<b>41.8</b>	<b>45.1</b>	<b>48.1</b>

(a) Twelve months ended 30th June of year shown.

(iii) *Rate of Convictions, 1881 to 1951.* The rate of convictions at ten-year intervals over a period of 70 years is shown below.

**RATE OF CONVICTIONS FOR SERIOUS CRIME AT MAGISTRATES' COURTS: AUSTRALIA.**

Year .. .. .	1881.	1891.	1901.	1911.	1921.	1931.	1941.	1951.
Convictions per 10,000 persons ..	69.3	44.8	29.1	24.6	29.2	37.1	33.6	37.1

5. *Committals to Higher Courts.*—(i) *Number of Committals.* The following table shows the number of offences, classified according to the nature of the offence, for which persons appearing in the lower courts were committed to higher courts for each State and Territory for the year 1957:—

**COMMITTALS TO HIGHER COURTS, 1957.**

Class of Offence.	N.S.W.	Vic.	Q'land. (a)(b)	S. Aust. (a)	W.Aust.	Tas.	N.T.(a)	A.C.T.	Aus- tralia.
Against the Person ..	1,431	519	239	169	61	35	19	8	2,481
Against Property ..	5,378	1,790	454	341	264	527	27	29	8,810
Forgery and Offences against the Currency ..	198	122	4	15	11	29	9	..	388
Against Good Order ..	42	21	..	4	7	5	4	..	83
Other .. .. .	172	255	15	23	13	8	3	..	489
<b>Total .. .. .</b>	<b>7,221</b>	<b>2,707</b>	<b>712</b>	<b>552</b>	<b>356</b>	<b>604</b>	<b>62</b>	<b>37</b>	<b>12,251</b>

(a) Twelve months ended 30th June of year shown. (b) A person convicted on several counts at the one hearing appears only once, but if a person be convicted at different hearings during the year, whether for the same or for a different type of offence, the results of all hearings are recorded separately.

The following table shows the number of committals to higher courts for each of the years 1953 to 1957:—

**COMMITTALS TO HIGHER COURTS.**

State or Territory.	1953.	1954.	1955.	1956.	1957.
New South Wales .. ..	4,263	4,205	4,792	6,056	7,221
Victoria .. .. .	2,071	2,082	2,198	2,624	2,707
Queensland(a) .. ..	605	609	482	572	712
South Australia(a) ..	554	422	426	432	552
Western Australia ..	384	381	454	386	356
Tasmania .. .. .	337	357	348	321	604
Northern Territory(a)	35	46	45	87	62
Australian Capital Territory ..	19	23	25	40	37
<b>Australia .. .. .</b>	<b>8,268</b>	<b>8,125</b>	<b>8,770</b>	<b>10,518</b>	<b>12,251</b>

(a) Twelve months ended 30th June of year shown.

(ii) *Rate of Committals, 1881 to 1951.* The rate of committals to higher courts for serious crime at ten-year intervals since 1881 is shown below:—

**RATE OF COMMITTALS TO HIGHER COURTS, AUSTRALIA.**

Year .. .. .	1881.	1891.	1901.	1911.	1921.	1931.	1941.	1951.
Committals per 10,000 persons ..	12	11	8	6	7	8	5	8

6. *Drunkness.—(i) Cases and Convictions.* The numbers of arrests for drunkness and the convictions recorded during each of the years 1953 to 1957 are given in the following table:—

**DRUNKENNESS : CASES AND CONVICTIONS.**

State or Territory.	1953.	1954.	1955.	1956.	1957.
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**CASES.**

New South Wales .. ..	72,765	72,591	81,199	77,867	76,700
Victoria .. .. .	19,424	20,167	20,685	20,457	25,657
Queensland(a) .. .. .	22,994	21,257	23,986	22,748	23,550
South Australia(a) .. ..	6,317	5,530	4,772	4,739	5,030
Western Australia .. ..	6,274	5,850	5,752	5,959	5,484
Tasmania .. .. .	800	836	776	705	786
Northern Territory(a) .. ..	434	707	487	507	1,059
Australian Capital Territory ..	381	240	231	279	358
<b>Australia .. .. .</b>	<b>129,389</b>	<b>127,178</b>	<b>137,888</b>	<b>133,261</b>	<b>138,624</b>

**CONVICTIONS.**

New South Wales .. ..	72,647	72,541	80,457	77,195	75,953
Victoria .. .. .	19,226	19,955	20,437	20,184	25,284
Queensland(a) .. .. .	22,932	21,199	23,947	22,687	23,521
South Australia(a) .. ..	6,307	5,509	4,765	4,732	5,019
Western Australia .. ..	6,210	5,809	5,720	5,912	5,428
Tasmania .. .. .	763	798	757	674	760
Northern Territory(a) .. ..	424	699	474	502	1,029
Australian Capital Territory ..	378	240	231	271	322
<b>Australia .. .. .</b>	<b>128,887</b>	<b>126,750</b>	<b>136,788</b>	<b>132,167</b>	<b>137,316</b>

(a) Twelve months ended 30th June of year shown.

The term "drunkness" includes drunkness and disorderliness, and habitual drunkness.

(ii) *Convictions per 10,000 of Population.* In the twenties, the convictions for drunkness averaged approximately 100 per 10,000 of population, but the rate fell away considerably during 1930 and 1931, being only 57.1 in the latter year. The average then rose steadily, the annual average for the period 1936 to 1939 being 82.7 and that for the years 1940 to 1945, 90.8. In 1946, the convictions per 10,000 rose very steeply to 132.1, increasing further to 174.5 by 1951, since when they have declined again to 142.8 in 1957.

The rates of convictions for drunkenness since 1953 are shown in the following table:—

**CONVICTIONS FOR DRUNKENNESS.**  
(PER 10,000 OF POPULATION.)

State or Territory.	1953.	1954.	1955.	1956.	1957.
New South Wales .. ..	214.5	211.6	230.4	217.1	209.7
Victoria .. ..	80.3	81.3	80.9	77.5	94.6
Queensland(a) .. ..	180.2	163.0	180.7	167.7	170.4
South Australia(a) .. ..	82.3	70.1	59.0	56.7	58.3
Western Australia .. ..	100.0	90.7	86.8	87.3	79.5
Tasmania .. ..	24.9	25.6	23.9	20.9	23.0
Northern Territory(a) .. ..	278.2	438.8	286.6	287.3	555.8
Australian Capital Territory ..	131.6	79.0	71.3	78.1	85.6
<b>Australia .. ..</b>	<b>146.6</b>	<b>141.4</b>	<b>149.1</b>	<b>140.6</b>	<b>142.8</b>

(a) Twelve months ended 30th June of year shown.

(iii) *Consumption of Intoxicants.* The following table shows the consumption of spirits, wine and beer per head of population in Australia during the years 1953-54 to 1957-58:—

**CONSUMPTION OF INTOXICANTS IN AUSTRALIA PER HEAD OF POPULATION.**

Year.	Spirits.	Wine.	Beer.
	Proof Gals.	Gals.	Gals.
1953-54 .. .. .	0.25	1.39	23.05
1954-55 .. .. .	0.29	1.11	24.26
1955-56 .. .. .	0.31	1.11	24.16
1956-57 .. .. .	0.28	1.15	22.88
1957-58 .. .. .	0.28	(a)1.14	(a)23.00

(a) Preliminary figures.

(iv) *Remedial Treatment of Drunkenness.* Legislation has been passed in each State providing for the committal of inebriates to special government institutions. The laws in the various States are as follows:—New South Wales, Inebriates Act 1912-1949; Victoria, Inebriates Act 1958 Queensland, Inebriate Institutions Act 1896; South Australia, Inebriates Act 1908-1934, Convicted Inebriates Act 1913-1934; Western Australia, Inebriates Act 1912-1919; Tasmania, Inebriates Act 1885, Inebriate Hospitals Acts 1892 and 1941; Northern Territory, the Inebriates Act 1908 of South Australia; Australian Capital Territory, the New South Wales Inebriates Act 1900 amended in 1909, and the Inebriates Ordinance 1938 of the Australian Capital Territory. In New South Wales, the care and treatment of inebriates other than those convicted of an offence are under the control of the Inspector-General of Mental Hospitals. In Victoria, a Psychiatric Clinic has been established at Pentridge Gaol and some remedial treatment is carried out there under the control of the Department of Mental Hygiene. It is proposed to add an alcoholics section to the Psychiatric Clinic in the near future. The Inebriates Home in Queensland is under the control of the Department of Health and Home Affairs. An alcoholism clinic was opened as an annexe to the Brisbane General Hospital in 1958 and in-patient and out-patient treatment is given there to voluntary patients. In Western Australia, the treatment of inebriates is under the control of the Inspector-General of Mental Health Services. In Tasmania, a charitable institution has been established by the Gaols Department, but treatment is purely custodial. A certain amount of remedial treatment is undertaken by the Director of Mental Health. Under an agreement between the Commonwealth and New South Wales and by virtue of the Insane Persons and Inebriates (Committal and Detention) Ordinance 1936-1937, inebriates committed to an institution from the Australian Capital Territory are placed in New South Wales institutions, where they are under the control of the appropriate New South Wales authorities and receive the same care and treatment as inebriates committed in the State.

7. **First Offenders.**—In all States, statutes dealing with first offenders have been in force for many years. Existing legislation is as follows:—New South Wales, Crimes Act 1900–1955, First Offenders (Women) Act 1919 amended in 1929; Victoria, Crimes Act 1958; Queensland, Criminal Code Acts 1899 to 1945; South Australia, Offenders Probation Act of 1913–1953; Western Australia, Criminal Code Act 1913–1956; Tasmania, Probation of Offenders Act 1934; Northern Territory, the Offenders Probation Act 1887 of South Australia. Australian Capital Territory, the Crimes Act 1900 of New South Wales amended by Crimes Ordinances 1931, 1942, 1944 and 1951. Provisions similar to those of the First Offenders (Women) Act 1919 of New South Wales have been incorporated in the Australian Capital Territory by the First Offenders (Women) Ordinance 1947. In New South Wales, Queensland, South Australia, and Western Australia, the court may allow a first offender convicted of a minor offence to go free on recognizances being entered into for his good behaviour for a certain period. In Victoria, in accordance with the provisions of the Crimes Act, 1958, where any person is convicted by any court of any offence for which a term of imprisonment may be imposed (otherwise than in default of payment of a fine) and the court is of the opinion that, having regard to the circumstances, including the nature of the offence and the character and antecedents of the offender, it is expedient to do so, the court may, instead of sentencing him, make a probation order requiring him to be under the supervision of a probation officer for such period being not less than one year and not more than five years, as is specified in the order. In Western Australia, the court may also dismiss the indictment or complaint without proceeding to conviction. In Tasmania, the court may discharge an offender on his recognizance, with or without sureties, to be of good behaviour and to appear for sentence when called upon at any time during the following three years. The offender may be placed under the supervision of a probation officer. In the Northern Territory, the court may suspend the sentence imposed on a first offender punishable on summary conviction, or by less than two years imprisonment, upon his entering into a recognizance to be of good behaviour for a certain period. In the Australian Capital Territory, the court may, without proceeding to conviction, dismiss a charge in respect of an offence punishable summarily, or may discharge the person charged conditionally on his entering into a recognizance to be of good behaviour for a certain period. Alternatively, the court may suspend the sentence imposed on a first offender upon his entering into a recognizance to be of good behaviour for a certain period.

8. **Children's Courts.**—(i) *New South Wales.* Children's Courts, established in 1905, exercise jurisdiction under the Child Welfare Act 1939–55. Where practicable, they are not held in ordinary court rooms, and persons not directly interested are excluded from any hearing in order that children may be protected against the adverse influences which they would encounter in ordinary courts.

The magistrates exercise all the powers of a Court of Petty Sessions in respect of offences committed by or against children under 18 years of age. They also exercise jurisdiction in respect of neglected and uncontrollable children. Their functions are reformative, not punitive; they may commit children to institutions, to the care of persons other than the parents, or to the care of the Minister for Education.

(ii) *Victoria.* The jurisdiction of Children's Courts is limited to children under the age of 17 years. Two stipendiary special magistrates with jurisdiction throughout the State have the assistance of five stipendiary probation officers who investigate problem cases which come before the court. A clinic has been established to deal with cases referred to it by the court.

(iii) *Queensland.* Children, under the age of 17 years, before the Court on summary charges are dealt with under the Children's Court Acts 1907–1930 and the State Children Acts 1911–1955. The Children's Court in the metropolitan area is presided over by a magistrate, and the services of the psychiatric clinic are available to him if he considers they are needed. Proceedings are held *in camera*. A non-commissioned police officer is present to offer any observations he considers necessary and to assist the magistrate. In country areas, the court is presided over by the local stipendiary magistrate or, in his absence, by two justices. If found guilty, a child may be either admonished, released on probation or committed to the care of the State Children Department or an institution. A conviction will not necessarily be recorded against him. His parent or guardian may be ordered to pay damages to the wronged party, and in default is liable to the same consequences as a defendant in an ordinary Court of Petty Sessions.

(iv) *South Australia.* Provision for the treatment of juvenile offenders under the age of 18 years is contained in various Acts, the main ones being the Maintenance Act 1926–1952, the Juvenile Courts Act 1941, the Justices Act 1921–1957, and the Offenders Probation Act 1913–1953. A Juvenile Court to hear cases of offences by children is constituted by a special magistrate or two justices of a Juvenile Court and it has power to determine all charges other than homicide. A child convicted of an offence punishable by imprisonment can be committed by a court only to a reformatory. For indictable offences, the penalty is committal to a reformatory or a fine of up to £50.

(v) *Western Australia.* Children's Courts are established to deal with offenders under the age of 18 years and to hear cases of certain offences against children. Special magistrates are appointed for Children's Courts, and the Governor may appoint other persons to be members of a particular Children's Court. One member may sit and adjudicate with the special magistrate, but in the magistrate's absence at least two members must be present.

A Children's Court is deemed to be a court of summary jurisdiction and may exercise exclusive jurisdiction in respect of all offences except wilful murder, murder, manslaughter or treason alleged to have been committed by children.

(vi) *Tasmania.* Under the provisions of the Infants' Welfare Act 1935, Children's Courts are established to deal with offenders under the age of 17 years. Special magistrates are appointed for Children's Courts by the Governor. One or two special magistrates, or one or two justices constitute a court.

A Children's Court is deemed to be a court of summary jurisdiction, and may exercise exclusive jurisdiction in respect of all offences alleged to have been committed by children.

(vii) *Australian Capital Territory.* The Child Welfare Ordinance 1957 provides that the Court of Petty Sessions constitutes the Children's Court when it is hearing proceedings involving persons under the age of 18 years. Its proceedings are similar to those of an ordinary Court of Petty Sessions except that persons not directly interested are excluded from the Court. The Court has power to hear and determine summarily a charge for an indictable offence. It may release an offender on probation, commit him to the care of a specified person, make him a government ward or commit him to an institution for up to three years.

(viii) *Northern Territory.* The Child Welfare Ordinance 1958 provides for the establishment of Children's Courts. These courts are constituted by a special magistrate and one member of the Child Welfare Council authorized to sit as a member of the Children's Court. Where no Children's Court has been established for a particular area, or where special circumstances require it, the jurisdiction of a Children's Court may be exercised by a Court of Summary Jurisdiction constituted by a special magistrate.

Proceedings in a Children's Court are in form similar to proceedings in a Court of Summary Jurisdiction, but no reports of proceedings may be published without the express authority of the Court, and any person not directly concerned may be excluded from the hearing.

A Children's Court has jurisdiction in respect of all offences committed by persons under 18 years of age in respect of which proceedings may be taken in a Court of Summary Jurisdiction. In dealing with such offences, the Court may, in cases other than homicide, impose a fine not exceeding fifty pounds or a sentence of imprisonment for not more than six months, and, in addition to or in lieu of these punishments, may make an order committing the child to the care of the Director of Child Welfare or of a person who is willing to undertake the care on the Court's terms and conditions (in which case the child may be declared a State child), or it may commit the child to an institution for a specified period or release the child on probation on such conditions as the Court orders. Children's Courts also exercise jurisdiction in respect of destitute, neglected, incorrigible or uncontrollable children.

## B. HIGHER (JUDGES') COURTS.

1. Persons Convicted at Higher Courts.—The following table shows for each State and Territory and for Australia as a whole the number of persons convicted at higher courts during 1957, classified according to the nature of the offence:—

## PERSONS CONVICTED AT HIGHER COURTS, 1957.

Offence.	N.S.W. (a)	Vic.	Q'land (a)(b)	S. Aust.	W.Aust.	Tas. (c)	N.T. (a)	A.C.T.	Aus- tralia.
<b>I. OFFENCES AGAINST THE PERSON.</b>									
Concealment of Birth ..		1	1	..	..	..	..	..	2
Murder ..	10	2	5	1	3	..	..	..	21
Attempted Murder ..	2	2	3	1	..	..	..	..	8
Manslaughter ..	21	13	4	8	..	1	3	..	50
Culpable Driving ..	17	..	..	..	..	..	..	..	17
Rape ..	1	3	4	4	..	1	..	..	13
Other Offences against Females ..	195	161	47	71	..	2	3	1	480
Abduction ..	1	..	4	..	..	1	..	..	6
Incest ..	..	..	6	..	4	..	..	..	10
Unnatural Offences ..	143	103	42	19	10	3	..	2	322
Abortion and Attempts to Procure ..	1	..	6	1	..	..	..	..	8
Bigamy ..	40	14	7	5	8	1	..	..	75
Aggravated Assault ..	28	..	30	4	..	6	8	..	76
Common Assault ..	36	38	7	4	8	2	3	..	98
Malicious Wounding ..	36	31	..	..	..	..	..	..	67
Other Offences against the Person ..	18	8	1	18	..	2	..	..	47
<b>Total ..</b>	<b>549</b>	<b>376</b>	<b>167</b>	<b>136</b>	<b>33</b>	<b>19</b>	<b>17</b>	<b>3</b>	<b>1,300</b>
<b>II. OTHER OFFENCES AGAINST PROPERTY.</b>									
Burglary, Breaking and Entering ..	899	696	282	179	106	102	10	12	2,286
Robbery and Stealing from the Person ..	66	44	15	6	3	34	..	16	184
Horse, Cattle and Sheep Stealing ..	..	13	10	6	3	..	..	..	32
Embezzlement or Fraudulent Misappropriation ..	60	11	5	9	11	2	..	..	98
Other Larceny ..	404	170	34	43	25	..	14	..	690
Illegally using Vehicles ..	3	44	16	..	3	..	..	..	66
Receiving ..	85	57	12	11	3	5	..	..	173
Fraud and False Pretences ..	105	33	6	21	2	28	8	..	203
Arson ..	2	3	6	3	..	3	..	..	17
Malicious Damage to Property or Animals ..	17	5	..	1	..	2	..	..	25
Other Offences against Property ..	5	22	7	11	2	2	..	1	50
<b>Total ..</b>	<b>1,646</b>	<b>1,098</b>	<b>393</b>	<b>290</b>	<b>158</b>	<b>178</b>	<b>32</b>	<b>29</b>	<b>3,824</b>
<b>III. FORGERY AND OFFENCES AGAINST THE CURRENCY.</b>									
Forgery and Uttering Forged Instruments ..	11	60	5	11	1	..	2	..	90
Other Offences against the Currency ..	1	..	..	..	..	..	..	..	1
<b>Total ..</b>	<b>12</b>	<b>60</b>	<b>5</b>	<b>11</b>	<b>1</b>	<b>..</b>	<b>2</b>	<b>..</b>	<b>91</b>
<b>IV. OFFENCES AGAINST GOOD ORDER</b>									
..	4	2	..	2	5	6	8	..	27
<b>V. OTHER</b>									
..	14	107	19	20	3	2	..	..	165
<b>Total all Offences ..</b>	<b>2,225</b>	<b>1,643</b>	<b>584</b>	<b>459</b>	<b>200</b>	<b>205</b>	<b>59</b>	<b>32</b>	<b>5,407</b>

(a) Year ended 30th June. (b) A person convicted on several counts at the one hearing appears only once, but if a person be convicted at different hearings during the year, whether for the same or for a different type of offence, the results of all hearings are recorded separately. (c) Convictions.

2. **Persons Convicted at Higher Courts.** The numbers of persons convicted and rates of conviction at higher courts for the years 1953 to 1957 are given in the following table:—

**PERSONS CONVICTED AT HIGHER COURTS.**

State or Territory.	1953.	1954.	1955.	1956.	1957.
NUMBER.					
New South Wales(a)	1,629	1,449	1,631	1,933	2,225
Victoria .. .. .	918	912	1,043	1,249	1,643
Queensland(a)(b)	419	502	382	431	584
South Australia .. .. .	330	312	340	362	459
Western Australia .. .. .	241	216	260	241	200
Tasmania(c)	203	244	154	184	205
Northern Territory(a)	26	51	55	72	59
Australian Capital Territory .. .. .	10	26	20	40	32
<b>Australia .. .. .</b>	<b>3,776</b>	<b>3,712</b>	<b>3,885</b>	<b>4,512</b>	<b>5,407</b>

**PER 10,000 OF POPULATION.**

New South Wales(a)	4.8	4.3	4.7	5.5	6.2
Victoria .. .. .	3.8	3.7	4.1	4.8	6.1
Queensland(a)(b)	3.3	3.9	2.9	3.2	4.2
South Australia .. .. .	4.3	3.9	4.1	4.3	5.3
Western Australia .. .. .	3.9	3.4	3.9	3.6	2.9
Tasmania(c)	6.6	7.8	4.9	5.7	6.8
Northern Territory(a)	17.1	32.0	33.3	41.2	32.2
Australian Capital Territory .. .. .	3.5	8.6	6.2	11.5	8.5
<b>Australia .. .. .</b>	<b>4.3</b>	<b>4.1</b>	<b>4.2</b>	<b>4.8</b>	<b>5.6</b>

(a) Twelve months ended 30th June of year shown. (b) A person convicted on several counts at the one hearing appears only once, but if a person be convicted at different hearings during the year, whether for the same or for a different type of offence, the results of all hearings are recorded separately. (c) Convictions.

3. **Habitual Offenders.**—An account of the methods adopted in each State in connexion with habitual offenders is given in the following paragraphs.

(i) *New South Wales.* The Habitual Criminals Act 1957 gives power to judges to declare as an habitual criminal any person of or above the age of 25 years who has been convicted on indictment and has on at least two occasions previously served separate terms of imprisonment as a consequence of convictions for indictable offences provided that such offences were not dealt with summarily without his consent. A person may also be pronounced by a Judge to be an habitual criminal upon recommendation by a Stipendiary Magistrate.

A judge, having pronounced a person to be an habitual criminal, shall sentence him to a term of imprisonment of not less than five years nor more than fourteen years.

An habitual criminal so sentenced may be considered for release on licence in the light of his conduct and attitude after he has served two-thirds of his sentence. He will, in any event, be granted a remission to permit his release on licence after five-sixths of his sentence, subject to good conduct and industry.

At 30th June, 1958, there were 119 prisoners detained in pursuance of the legislation.

(ii) *Victoria.* The Indeterminate Sentences provisions of the Crimes Act were abolished as from 1st July, 1957, with the proclamation of the Penal Reform Act 1956. The terms "reformatory prison" and "habitual criminal" also ceased to exist as from that date.

Under the Penal Reform Act 1956, a sentence of twelve months or more must contain provision for an offender's release on parole after he has served a minimum term which must be named. With sentences of under twelve months, the courts may fix a minimum term.

The relevant parts of the Penal Reform Act 1956 have now been embodied in Sections 506 to 542 of the Crimes Act 1958. In the case of the persistent offender, if the court is satisfied that it is expedient for the protection of the public that he should be detained in gaol for a substantial time, the court may pass a sentence of preventive detention for a term of not more than ten years and where any such sentence is passed shall fix a minimum term during which the offender shall not be eligible to be released on parole.

(iii) *Queensland.* Sections 659A to 659I of the Queensland Criminal Code deal with habitual criminals. Only the Supreme Court or a judge thereof may declare a person to be an habitual criminal. An habitual criminal is to be detained in a reformatory prison (Section 659D) and there employed (Section 659F).

Where the Supreme Court or a judge recommends the discharge of an habitual criminal, the Governor may direct his discharge and may order him so long as he remains in Queensland to report at intervals during any period not exceeding two years (Section 659G).

(iv) *South Australia.* The Criminal Law Consolidation Act 1935–1956 provides that persons previously convicted of a certain number of indictable offences of a particular class may be declared habitual criminals, and shall then be detained during Her Majesty's pleasure. Proof of previous conviction is in all cases relevant to the question of penalty.

(v) *Western Australia.* Under the Criminal Code Amendment Act of 1918, power is given to sentence prisoners to be detained in a reformatory prison during the Governor's pleasure, where such prisoner is deemed to be an habitual criminal, or in other special circumstances where the Court considers such a sentence is fit.

The number under preventive detention on 30th June, 1957, was 18 and the total number dealt with since the passing of the Act was 163.

(vi) *Tasmania.* Since the Indeterminate Sentences Act came into operation in 1922, 78 persons have been confined under its provisions; 12 were in custody at the end of 1958.

Of the 66 released on probation 16 have been re-committed.

(vii) *Northern Territory.* The legislation in force in South Australia applies to the Northern Territory.

(viii) *Australian Capital Territory.* The Habitual Criminals Act 1905–1952 of New South Wales applies in the Australian Capital Territory. This Act gives power to judges to declare as habitual criminals persons who have a certain scheduled number of convictions. Action may be taken either on the initiative of the judge in indictable matters, or on the recommendation of a stipendiary magistrate, when the matter becomes a special hearing before a judge. The result of the declaration is that the offender is kept for an indefinite period after the completion of his sentence, and is released only when he is considered fit to be at large.

**4. Capital Punishment.**—There were nine executions in Australia during the period 1948 to 1957. Three took place in Victoria (in 1951), three in South Australia (one in 1950, one in 1953 and one in 1956), one in Western Australia (in 1952), and two in the Northern Territory (in 1952). In each case the offence was murder.

Under the Criminal Code Amendment Act 1922, capital punishment was abolished in Queensland, and in New South Wales the Crimes Act was amended in 1955 abolishing capital punishment for all offences except treason and piracy.

In the early days of the history of Australia, the penalty of death was attached to a large number of offences, many of which would now be dealt with in a Magistrate's Court. The present tendency is to restrict death sentences to persons convicted of murder. Although rape is a capital offence in some States, the penalty of death has not been imposed in recent years on persons convicted of it.

The average annual number of executions in Australia from 1861 to 1880 was 9; from 1881 to 1900, 6; from 1901 to 1910, 4; from 1911 to 1920, 2; from 1921 to 1930, 2; from 1931 to 1940, 1; and from 1941 to 1950, 0.5.

§ 3. Civil Courts.

A. LOWER COURTS.

The total numbers of plaints entered and the amounts awarded to plaintiffs during 1957 are shown in the following table. The figures are compiled from returns from the Small Debts Courts in New South Wales, Courts of Petty Sessions in Victoria, Magistrates' Courts in Queensland, Local Courts in South Australia and Western Australia, Courts of Requests in Tasmania, Courts of Summary Jurisdiction in the Northern Territory and the Court of Petty Sessions in the Australian Capital Territory.

CIVIL CASES AT LOWER COURTS, 1957.

Particulars.	N.S.W.	Vic.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	N.T. (a)	A.C.T.	Aus- tralia.
Plaints Entered No.	81,422	118,634	(b)9,548	57,121	39,259	30,286	1,027	1,695	338,992
Amount Awarded to Plaintiffs £	652,531	2,153,035	551,824	991,114	525,064	279,900	(c)	33,554	5,187,022 (d)

(a) Twelve months ended 30th June of year shown. (b) Number of cases heard. (c) Not available. (d) Excludes Northern Territory.

B. HIGHER COURTS.

1. General.—The following table shows the civil judgments (excluding those for divorce and bankruptcy) in the higher courts during 1957. The particulars given below include the number and amount of judgments entered by default or confession, or agreement, and differ from those in previous issues of the Official Year Book, which related in most States only to cases tried during the year.

CIVIL CASES AT HIGHER COURTS, 1957.

Particulars.	N.S.W. (a)	Vic.	Q'land. (b)	S. Aust.	W. Aust. (c)	Tas.	N.T. (b)	A.C.T.	Aus- tralia.
Judgments No.	10,182	8,845	988	143	262	556	(d)	242	(d)
Amount Awarded £	(d)	2,235,188	387,236	173,205	337,049	257,892	(d)	686,655	(d)

(a) Excludes judgments signed in the Supreme Court. (b) Twelve months ended 30th June of year shown. (c) Judgments signed and entered. (d) Not available.

2. Divorce.—(i) General. The marriage relationship may be terminated by process of law in any one of three ways: by dissolution of the marriage, by annulment of the marriage, or by the grant of a judicial separation. The term "divorce" is used sometimes to designate all three processes, and sometimes to designate only the first. In this publication, it is used in the wider sense.

Every decree for dissolution of marriage is first a decree nisi. During a period which varies from State to State, any person may show cause why the decree should not be made absolute, either because of collusion or because material facts were not before the court. In some States, the Attorney-General also may intervene. If no matter in opposition is pending, the decree nisi may be made absolute at the expiration of the time set. A decree absolute for dissolution of marriage dissolves the marriage tie at the time when it is made, the parties to that marriage cease to have the status of husband and wife, and are free to remarry after the expiration of the time set down for appeal against the court's decision.

Proceedings for nullity of marriage may be instituted in respect of a marriage which is void or voidable. A marriage which is void has no existence at all and so, strictly speaking, it is not necessary to obtain a decree of nullity of marriage, but as the issue may depend on difficult questions of fact, such as insanity, it is advisable to seek a court judgment, which is binding and decides the question of the validity of the marriage. Proceedings for annulling a voidable marriage must be taken before the marriage is terminated by dissolution or death. Once the final decree has been pronounced, a voidable marriage is void *ab initio*, but until then the parties to it have the status of married people and transactions

concluded on the basis of the existence of that status cannot be undone or re-opened. Since the parties to a marriage which is void or which has been voided do not have the status of married people, they are free to remarry.

A decree of judicial separation leaves unimpaired the status of marriage, but suspends the rights and duties of the parties to the marriage with respect to cohabitation, and is a defence against a suit for the restitution of conjugal rights. A husband is not responsible for the acts of his wife, save that he is liable for necessities supplied to her if he has failed to pay alimony ordered by a court. Persons who have been judicially separated are not free to remarry.

(ii) *Number of Petitions filed.* The following table shows the number of petitions for dissolution of marriage, nullity of marriage and judicial separation filed in each State during 1957:—

**PETITIONS FILED FOR DISSOLUTION OF MARRIAGE, NULLITY OF MARRIAGE AND JUDICIAL SEPARATION, 1957.**

Petition for—	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Dissolution of Marriage</b>									
Husband Petitioner ..	1,667	822	346	324	348	130	10	24	3,671
Wife Petitioner ..	2,157	832	326	443	275	161	9	25	4,228
<i>Total</i> ..	<i>3,824</i>	<i>1,654</i>	<i>672</i>	<i>767</i>	<i>623</i>	<i>291</i>	<i>19</i>	<i>49</i>	<i>7,899</i>
<b>Nullity of Marriage</b>									
Husband Petitioner ..	22	12	..	3	2	..	..	1	40
Wife Petitioner ..	29	9	6	8	4	..	..	..	56
<i>Total</i> ..	<i>51</i>	<i>21</i>	<i>6</i>	<i>11</i>	<i>6</i>	<i>..</i>	<i>..</i>	<i>1</i>	<i>96</i>
<b>Judicial Separation</b>									
Husband Petitioner ..	..	..	1	..	4	..	..	1	6
Wife Petitioner ..	..	5	4	..	..	..	..	..	26
<i>Total</i> ..	<i>17</i>	<i>5</i>	<i>5</i>	<i>..</i>	<i>4</i>	<i>..</i>	<i>..</i>	<i>1</i>	<i>32</i>
<b>Total Petitions</b>									
Husband Petitioner No.	1,689	834	347	327	354	130	10	26	3,717
Wife Petitioner No.	2,203	846	336	451	279	161	9	25	4,310
%	43	50	51	42	56	45	53	51	46
%	57	50	49	58	44	55	47	49	54
<b>Grand Total</b> ..	<b>3,892</b>	<b>1,680</b>	<b>683</b>	<b>778</b>	<b>633</b>	<b>291</b>	<b>19</b>	<b>51</b>	<b>8,027</b>

(iii) *Number of Divorces granted, 1957.* The following table shows the number of dissolutions of marriage, nullities of marriage and judicial separations granted in each State during 1957:—

**DISSOLUTIONS OF MARRIAGE, NULLITIES OF MARRIAGE AND JUDICIAL SEPARATIONS GRANTED, 1957.**

Decree For—	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Dissolution of Marriage(a)</b>									
Husband Petitioner ..	1,296	642	306	233	292	83	8	15	2,875
Wife Petitioner ..	1,679	703	376	296	249	96	10	14	3,423
<i>Total</i> ..	<i>2,975</i>	<i>1,345</i>	<i>682</i>	<i>529</i>	<i>541</i>	<i>179</i>	<i>18</i>	<i>29</i>	<i>6,298</i>
<b>Nullity of Marriage(a)</b>									
Husband Petitioner ..	12	6	2	3	1	..	..	..	24
Wife Petitioner ..	20	9	5	5	..	1	..	..	40
<i>Total</i> ..	<i>32</i>	<i>15</i>	<i>7</i>	<i>8</i>	<i>1</i>	<i>1</i>	<i>..</i>	<i>..</i>	<i>64</i>
<b>Judicial Separation</b>									
Husband Petitioner ..	..	..	..	..	2	..	..	..	2
Wife Petitioner ..	6	2	..	1	1	..	..	..	10
<i>Total</i> ..	<i>6</i>	<i>2</i>	<i>..</i>	<i>1</i>	<i>3</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>12</i>
<b>Total Decrees</b>									
Husband Petitioner No.	1,308	648	308	236	295	83	8	15	2,901
Wife Petitioner No.	1,705	714	381	302	250	97	10	14	3,473
%	43	48	45	44	54	46	44	52	46
%	57	52	55	56	46	54	56	48	54
<b>Grand Total</b> ..	<b>3,013</b>	<b>1,362</b>	<b>689</b>	<b>538</b>	<b>545</b>	<b>180</b>	<b>18</b>	<b>29</b>	<b>6,374</b>

(a) Decrees absolute.

(iv) *Number of Divorces granted, 1953 to 1957.* The following table shows the number of dissolutions of marriage, nullities of marriage and judicial separations granted in each State and Territory for each year from 1953 to 1957:—

**DIVORCES GRANTED: AUSTRALIA.**

**DISSOLUTION OF MARRIAGE (DECREES ABSOLUTE).**

State or Territory.	1953.	1954.	1955.	1956.	1957.
New South Wales .. .. .	3,725	2,816	2,874	3,125	2,975
Victoria .. .. .	(a)2,096	(a)1,519	(a)1,674	(a)1,255	1,345
Queensland .. .. .	725	710	801	703	682
South Australia .. .. .	628	594	624	567	529
Western Australia .. .. .	535	530	479	544	541
Tasmania .. .. .	210	235	233	196	179
Northern Territory .. .. .	12	20	18	25	18
Australian Capital Territory .. .. .	31	33	21	20	29
<b>Australia .. .. .</b>	<b>7,962</b>	<b>6,457</b>	<b>6,724</b>	<b>6,435</b>	<b>6,298</b>

**NULLITY OF MARRIAGE (DECREES ABSOLUTE).**

State or Territory.	1953.	1954.	1955.	1956.	1957.
New South Wales .. .. .	21	28	17	18	32
Victoria .. .. .	(a) 31	(a) 20	(a) 16	(a) 13	15
Queensland .. .. .	5	4	2	5	7
South Australia .. .. .	8	4	4	5	8
Western Australia .. .. .	4	2	6	4	1
Tasmania .. .. .	..	2	..	1	1
Northern Territory .. .. .	..	..	..	..	..
Australian Capital Territory .. .. .	..	..	..	..	..
<b>Australia .. .. .</b>	<b>69</b>	<b>60</b>	<b>45</b>	<b>46</b>	<b>64</b>

**JUDICIAL SEPARATION.**

State or Territory.	1953.	1954.	1955.	1956.	1957.
New South Wales .. .. .	6	7	9	4	6
Victoria .. .. .	1	..	1	2	2
Queensland .. .. .	..	..	..	..	..
South Australia .. .. .	2	2	..	..	1
Western Australia .. .. .	..	1	3	4	3
Tasmania .. .. .	..	1	..	..	..
Northern Territory .. .. .	..	..	..	..	..
Australian Capital Territory .. .. .	1	..	..	1	..
<b>Australia .. .. .</b>	<b>10</b>	<b>11</b>	<b>13</b>	<b>11</b>	<b>12</b>

(a) Decrees nisi granted.

(v) *Average Number of Divorces granted Annually.* The ten-year averages of the numbers of divorces granted annually in Australia for the 80 years from 1871 to 1950 are as follows.

**DIVORCES : AUSTRALIA.**

Decade 1871–80. 1881–90. 1891–1900. 1901–10. 1911–20. 1921–30. 1931–40. 1941–50  
Average 29 70 357 399 742 1,693 2,508 6,187

(vi) *Grounds of Decree on which Divorces were granted.* The grounds on which dissolutions of marriage, nullities of marriage and judicial separations were granted during 1957 in each State and Territory are shown in the following table, but it should be borne in mind that the legal grounds for divorce vary as between States and Territories:—

**GROUND OF DISSOLUTION OF MARRIAGE, NULLITY OF MARRIAGE  
AND JUDICIAL SEPARATION, 1957.**

Ground.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Dissolution of Marriage—</b>									
Adultery .. .. .	765	368	180	190	240	55	7	17	1,822
Bigamy .. .. .	1	1	..	..	..	..	..	..	2
Conviction of Spouse for attempted Murder .. .. .	2	..	..	..	..	..	..	..	2
Cruelty .. .. .	103	7	1	111	..	6	2	1	231
Cruelty and Drunkenness .. .. .	95	13	..	..	1	3	..	..	112
Desertion .. .. .	1,558	882	492	206	140	115	9	11	3,413
Desertion (non-compliance with order for restitution of conjugal rights) .. .. .	394	..	..	..	..	..	..	..	394
Desertion and Adultery .. .. .	..	64	3	..	..	..	..	..	67
Drunkenness and Failure to Support .. .. .	36	1	..	9	..	..	..	..	46
Drunkenness and Neglect of Domestic Duties .. .. .	12	3	..	..	..	..	..	..	15
Failure to pay Maintenance .. .. .	..	..	..	2	16	..	..	..	18
Imprisonment .. .. .	6	2	..	3	5	..	..	..	16
Insanity .. .. .	(a) 1	4	4	3	3	..	..	..	15
Presumption of Death .. .. .	..	..	2	2	..	..	..	..	4
Refusal to Consummate .. .. .	..	..	..	..	2	..	..	..	2
Separation for over 5 years .. .. .	..	..	..	3	134	..	..	..	137
Sodomy .. .. .	2	..	..	..	..	..	..	..	2
<b>Total .. .. .</b>	<b>2,975</b>	<b>1,345</b>	<b>682</b>	<b>529</b>	<b>541</b>	<b>179</b>	<b>18</b>	<b>29</b>	<b>6,298</b>
<b>Nullity of Marriage—</b>									
Bigamy .. .. .	18	3	3	2	1	..	..	..	27
Impotence .. .. .	13	11	4	5	..	1	..	..	34
Invalid Marriage .. .. .	1	..	..	1	..	..	..	..	2
Want of Consent .. .. .	..	1	..	..	..	..	..	..	1
<b>Total .. .. .</b>	<b>32</b>	<b>15</b>	<b>7</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>..</b>	<b>..</b>	<b>64</b>
<b>Judicial Separation—</b>									
Adultery .. .. .	1	..	..	..	..	..	..	..	1
Cruelty .. .. .	2	..	..	..	1	1	..	..	4
Desertion .. .. .	(b) 3	1	..	..	2	..	..	..	6
Desertion and Adultery .. .. .	..	1	..	..	..	..	..	..	1
<b>Total .. .. .</b>	<b>6</b>	<b>2</b>	<b>..</b>	<b>..</b>	<b>3</b>	<b>1</b>	<b>..</b>	<b>..</b>	<b>12</b>

(a) Federal Jurisdiction.

(b) Includes non-compliance with order for restitution of conjugal rights.

(vii) *Ages of Husband and Wife at time of Dissolution of Marriage.* The following table shows the number of husbands and wives in each age group who were parties to marriages dissolved in 1957. Age is taken at the time the decree absolute is made.

Forty-two per cent. of wives were in the 25–34 years age group and 40 per cent. of husbands in the 30–39 years age group. These proportions have varied little during recent years and are considerably higher than the proportions of married persons of those age groups in the whole population (27 per cent. and 26 per cent. respectively at the Census of 30th June, 1947; 28 per cent. and 25 per cent. respectively at the Census of 30th June, 1954).

AGES OF PARTIES AT TIME OF DISSOLUTION OF MARRIAGE, AUSTRALIA, 1957.

Age of Husband (Years).	Age of Wife (Years).											Total Husbands.	
	Under 21.	21 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 and over.	Not stated.		
Under 21 ..	..	..	..	..	..	..	..	..	..	..	..	..	119
21 to 24 ..	17	82	15	3	..	..	..	..	..	..	..	1	866
25 to 29 ..	16	267	490	79	8	3	..	1	..	..	1	1	1,334
30 to 34 ..	3	69	567	560	113	13	6	2	..	..	1	1	1,171
35 to 39 ..	..	14	134	484	419	98	19	2	..	..	..	..	988
40 to 44 ..	..	3	37	174	376	321	68	8	1	..	..	..	737
45 to 49 ..	..	1	10	47	107	275	244	44	6	2	..	..	495
50 to 54 ..	..	1	4	12	41	120	188	110	16	3	..	..	263
55 to 59 ..	..	1	1	9	13	34	54	84	57	10	..	..	214
60 and over ..	..	..	1	2	4	9	21	39	51	87	..	..	111
Not stated ..	..	1	4	1	1	1	..	..	..	..	..	103	6,298
Total Wives	36	439	1,263	1,371	1,082	874	601	290	131	103	108	..	6,298

(viii) *Duration and Issue of Marriages Dissolved.* The following table shows the number of dissolutions of marriage granted in 1957, classified according to the legal duration of the marriage (i.e., the period from the date of marriage to the date when the decree nisi was made absolute) and issue. The majority of marriages dissolved are of less than fifteen years' duration and 40 per cent. of them are of less than ten years' duration. Of all marriages dissolved in 1957, 34.9 per cent. were childless. These proportions have varied very little in recent years. The proportion of all childless marriages in the population was 16.7 per cent. at the Census of 30th June, 1947, and 18.5 per cent. at the Census of 30th June, 1954.

DURATION AND ISSUE OF MARRIAGES DISSOLVED, AUSTRALIA, 1957.

Duration of Marriage (Years).	Number of Marriages dissolved whose Issue was—													Total Dissolutions of Marriage.	Total Children.
	0	1	2	3	4	5	6	7	8	9	10	12	N.S.		
1 year and under 2 ..	18	4	..	..	..	..	..	..	..	..	..	..	..	22	4
2 years and under 3 ..	49	17	..	..	..	..	..	..	..	..	..	..	..	67	19
3 " " " 4 ..	102	35	6	1	..	..	..	..	..	..	..	..	..	144	50
4 " " " 5 ..	137	60	15	5	2	..	..	..	..	..	..	..	..	219	113
5 " " " 6 ..	209	121	29	5	..	..	..	..	..	..	..	..	..	365	194
6 " " " 7 ..	209	154	56	13	1	2	..	..	..	..	..	..	..	435	319
7 " " " 8 ..	199	141	80	13	3	..	..	1	..	..	..	..	..	438	359
8 " " " 9 ..	181	140	87	21	9	2	..	..	..	..	..	..	..	440	423
9 " " " 10 ..	175	121	94	25	3	2	..	..	..	..	..	..	..	420	406
10 " " " 11 ..	131	123	99	30	7	2	..	..	..	..	1	..	..	393	459
11 " " " 12 ..	98	99	94	32	13	2	..	..	..	..	..	..	..	338	445
12 " " " 13 ..	98	61	82	31	8	3	..	..	..	..	..	..	..	283	365
13 " " " 14 ..	60	59	72	38	7	..	2	..	..	..	..	..	..	238	357
14 " " " 15 ..	78	62	70	23	12	5	1	..	..	..	..	..	..	251	350
15 " " " 16 ..	76	83	63	30	18	4	1	2	..	..	..	..	..	277	411
16 " " " 17 ..	49	58	53	32	5	3	2	..	..	..	..	..	1	203	307
17 " " " 18 ..	53	57	66	25	14	1	..	2	..	..	..	..	..	218	339
18 " " " 19 ..	46	42	50	28	12	5	2	1	2	..	..	..	..	188	334
19 " " " 20 ..	29	49	41	23	10	2	4	..	..	..	..	..	..	158	274
20 " " " 21 ..	25	18	45	28	15	2	2	1	3	..	..	..	..	139	305
21 " " to 24 years ..	60	83	101	59	25	13	2	2	..	..	..	..	..	345	653
25 " " " 29 ..	55	91	110	67	35	7	8	3	1	1	2	..	..	380	793
30 " " " 34 ..	38	48	52	37	20	10	6	5	3	..	..	..	..	219	488
35 " " " 39 ..	12	4	11	16	6	8	3	3	..	1	1	..	..	65	196
40 " " " 44 ..	2	6	9	1	7	3	3	1	1	1	..	1	..	35	124
45 " " and over ..	4	..	4	1	..	1	1	1	1	..	..	..	..	13	37
Not Stated ..	2	1	1	..	..	..	..	..	..	..	..	..	1	5	3
Total Dissolutions of Marriage ..	2,195	1,737	1,391	584	232	77	37	22	11	3	4	1	4	6,298	..
Total Children ..	..	1,737	2,782	1,752	928	385	222	154	88	27	40	12	..	..	8,127

(ix) *Number of Divorced Persons at each Census 1901 to 1954.* The following table shows the number and proportions of divorced persons in Australia at each census from 1901 to 1954. A classification of these persons by age appeared in earlier issues of the Official Year Book (see No. 39, p. 269). Prior to 1911, no record was made of divorced persons in South Australia, so comparisons cannot be made to extend beyond that date.

**DIVORCED PERSONS AT CENSUS DATES : AGE DISTRIBUTION, AUSTRALIA.**

Sex.	Number.						Proportion per 10,000 of population, 15 years of age and over.					
	1901. (a)	1911.	1921.	1933.	1947.	1954.	1901. (a)	1911.	1921.	1933.	1947.	1954.
Males ..	1,234	2,368	4,233	10,298	25,052	32,389	10	15	23	42	89	100
Females ..	1,149	2,140	4,304	10,888	27,516	36,650	10	15	24	46	96	115

(a) Excludes South Australia.

3. **Bankruptcies.**—Particulars relating to bankruptcy in each State to the end of 1927 have been incorporated under this heading in issues of the Official Year Book prior to No. 23. On 1st August, 1928, the Commonwealth Bankruptcy Act, which is now the Bankruptcy Act 1924–1958, came into operation.

Under the Bankruptcy Act 1924–1958, the Commonwealth is divided into bankruptcy districts which coincide generally with State boundaries. A Federal Court of Bankruptcy has been established with jurisdiction throughout Australia but it exercises this jurisdiction mainly in the bankruptcy districts of New South Wales, which includes the Australian Capital Territory, and Victoria. Certain State courts have been invested with *federal jurisdiction in bankruptcy and, outside New South Wales and Victoria, usually exercise that jurisdiction in the appropriate bankruptcy district.*

Any person unable to pay his debts may voluntarily apply for the sequestration of his estate, or his creditors may apply for a compulsory sequestration, if he has committed an act of bankruptcy. The act of bankruptcy usually relied on is non-compliance by a debtor with a bankruptcy notice which requires the debtor to whom it is addressed to pay within a specified time, to a creditor who has obtained a final judgment or order to pay, the amount of the debt or satisfy the Court that he has a counter-claim, set-off, or cross demand which equals or exceeds the judgment debt. If a bankruptcy notice is not complied with, a creditor may thereupon present a petition against a debtor provided that—

- (1) the debt or debts amount to £50;
- (2) the act of bankruptcy relied on has occurred within the six months preceding the presentation of the petition; and
- (3) the statutory requirements relating to domicile or residence are applicable to the debtor.

Upon the issue of a sequestration order, the property of the bankrupt vests in the official receiver named in the order and his property is divisible among his creditors in accordance with the provisions of the Act. No creditor to whom the bankrupt is indebted in respect of any debt provable in bankruptcy has any remedy against the property or person of the bankrupt except by leave of the court.

Under Part XI of the Bankruptcy Act 1924–1958, instead of having a sequestration order made against his estate, a debtor may compound with his creditors or assign his estate for their benefit. Under Part XII of the Act, a debtor may enter into a scheme of arrangement. The object of Parts XI and XII of the Act is to allow a debtor and his creditors to enter into an agreement concerning the debts due to the creditors without having a sequestration order made against the debtor.

The Court has power to decide questions of law affecting a bankrupt estate. Questions of fact may be tried before a jury.

The Bankruptcy Act 1924–1958 provides for an Inspector-General in Bankruptcy, who performs such duties as are prescribed. The Act also provides for a Registrar and an Official Receiver to be appointed for each bankruptcy district.

A Registrar in Bankruptcy is controlled by the Court and has such duties as the Attorney-General of the Commonwealth directs, or as are prescribed, and exercises such functions of an administrative nature as are authorized by the Court. He may examine a bankrupt

or a person indebted to a bankrupt or having in his possession any of the estate or effects of a bankrupt. Stipendiary magistrates are appointed Deputy Registrars in country districts.

All sequestrated estates are vested in an Official Receiver, who is a permanent officer of the Commonwealth Public Service. His duties are to investigate the conduct, property and transactions of the debtor, and the cause of bankruptcy of a debtor and to realise and administer the estate of the debtor. He acts under the general authority of the Attorney-General and is controlled by the Court.

Persons registered by the Court as qualified to act as trustees may be appointed by resolution of the creditors to be trustees of estates. In cases where a registered trustee under a deed of arrangement, composition, or assignment (Parts XI and XII of the Bankruptcy Act) is removed from or vacates his office, the official receiver may be appointed by the Court to complete the administration of the estate, or the Court may direct the official receiver to convene a meeting of the creditors in the estate to enable them to appoint a registered trustee to complete the administration of the estate.

The following tables show the number of bankruptcies of the various types in each State, together with the assets and liabilities of the debtors, during the twelve months ended 30th June, 1958:—

#### BANKRUPTCY PROCEEDINGS, 1957-58.

State.		Sequestration Orders and Orders for Administration of Deceased Debtors' Estates.	Compositions without Bankruptcy, Part XI.	Deeds under Part XI.	Deeds of Arrangement, Part XII.	Total.
N.S.W. (a)	Number ..	443	7	1	73	524
	Liabilities £	1,218,551	30,265	1,572	759,830	2,010,218
	Assets £	696,209	10,841	894	899,643	1,607,587
Vic. ..	Number ..	357	1	1	59	418
	Liabilities £	716,777	3,051	1,409	300,191	1,021,428
	Assets £	430,867	6,871	1,018	237,265	676,021
Q'land	Number ..	155	..	..	26	181
	Liabilities £	443,387	..	..	163,722	607,109
	Assets £	257,046	..	..	120,333	377,379
S. Aust.	Number ..	222	26	15	..	263
	Liabilities £	400,058	127,377	117,966	..	645,401
	Assets £	173,485	132,634	69,813	..	375,932
W. Aust.	Number ..	116	85	11	..	212
	Liabilities £	210,598	537,421	45,420	..	793,439
	Assets £	61,098	481,049	35,950	..	578,097
Tas. ..	Number ..	64	..	..	6	70
	Liabilities £	136,942	..	..	47,610	184,552
	Assets £	62,163	..	..	58,615	120,778
N.T. ..	Number ..	..	1	..	..	1
	Liabilities £	..	9,020	..	..	9,020
	Assets £	..	4,637	..	..	4,637
Australia	Number ..	1,357	120	28	164	1,669
	Liabilities £	3,126,313	707,134	166,367	1,271,353	5,271,167
	Assets £	1,680,868	636,032	107,675	1,315,856	3,740,431

(a) Includes the Australian Capital Territory.

For purposes of comparison, the two tables which follow show Australian figures in respect of each of the various types of bankruptcy, and State figures in respect of all types of bankruptcy for the past five years.

Until 1954-55, the bankruptcy year ended on the 31st July. Thereafter it has ended on the 30th June. Figures for 1955-56, therefore, cover only eleven months.

## BANKRUPTCY PROCEEDINGS: AUSTRALIA.

Year.		Sequestration Orders and Orders for Administration of Deceased Debtors' Estates.	Compositions without Bankruptcy, Part XI.	Deeds under Part XI.	Deeds of Arrangement, Part XII.	Total.
1953-54	Number ..	687	40	5	113	845
	Liabilities £	1,763,134	285,299	34,448	829,585	2,912,466
	Assets £	1,079,830	309,992	24,453	734,376	2,148,651
1954-55	Number ..	769	66	19	123	977
	Liabilities £	1,724,252	284,027	145,003	1,013,150	3,166,432
	Assets £	946,761	268,729	113,995	728,232	2,057,717
1955-56 (a)	Number ..	798	80	14	120	1,012
	Liabilities £	2,167,986	541,666	110,541	832,635	3,652,828
	Assets £	1,082,492	459,242	81,000	856,009	2,478,743
1956-57	Number ..	1,200	126	32	171	1,529
	Liabilities £	3,243,749	501,486	126,140	1,242,834	5,114,209
	Assets £	1,795,830	545,275	126,063	1,196,604	3,663,772
1957-58	Number ..	1,357	120	28	164	1,669
	Liabilities £	3,126,313	707,134	166,367	1,271,353	5,271,167
	Assets £	1,680,868	636,032	107,675	1,315,856	3,740,431

(a) Eleven months.

## BANKRUPTCY PROCEEDINGS, STATES.

Year.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Aus- tralia.
1953-54 ..	Number ..	330	175	145	82	74	39	845
	Liabilities £	1,221,353	597,090	437,119	229,984	330,051	96,869	2,912,466
	Assets £	968,456	285,854	341,806	147,622	352,093	52,820	2,148,651
1954-55 ..	Number ..	360	200	155	111	100	49	977
	Liabilities £	1,162,001	764,083	461,874	338,481	315,157	121,198	3,638
	Assets £	789,226	365,151	338,287	241,597	237,192	78,851	7,413
1955-56 .. (b)	Number ..	400	206	153	99	120	33	1,012
	Liabilities £	1,644,478	712,223	361,636	441,626	373,119	114,159	5,587
	Assets £	1,092,323	522,159	151,954	342,790	276,246	92,642	629
1956-57 ..	Number ..	555	335	152	214	204	66	1,529
	Liabilities £	2,262,611	992,246	449,519	598,090	562,808	220,155	28,780
	Assets £	1,441,731	661,268	394,898	352,916	608,424	181,939	22,595
1957-58 ..	Number ..	524	418	181	263	212	70	1,669
	Liabilities £	2,010,218	1,021,428	607,109	645,401	793,439	184,552	9,020
	Assets £	1,607,587	676,021	377,379	375,932	578,097	120,778	4,637

(a) Includes the Australian Capital Territory.

(b) Eleven months.

4. High Court of Australia.—Under the provisions of Section 71 of the Commonwealth Constitution, the judicial power of the Commonwealth is vested in a Supreme Court called the High Court of Australia, and in such other courts as the Parliament creates or invests with Federal jurisdiction. The High Court of Australia possesses both original and appellate jurisdiction. The powers of the Court are defined in the Commonwealth Constitution, and in the Judiciary Act 1903-1955. The Court consists of a Chief Justice and six other judges. Sittings of the Court are held in the capitals of the various States as occasion requires. The High Court functions as a Court of Appeal for Australia. The following statement shows the transactions of the High Court for 1957 and 1958:—

## TRANSACTIONS OF THE HIGH COURT OF AUSTRALIA.

Original Jurisdiction. (a)	1957.	1958.	Appellate Jurisdiction.	1957.	1958.
	Number of writs issued	197		196	Number of appeals set down for hearing ..
Number of cases entered for trial ..	14	48	Number allowed ..	46	25
Judgments for plaintiffs	43	29	Number dismissed ..	50	46
Judgments for defendants	3	2	Otherwise disposed of	11	21
Otherwise disposed of ..	7	16			
Amount of judgments ..	£170,198	£57,589			

(a) Some matters dealt with by the High Court do not originate as writs nor are entered as cases.

During 1957 and 1958, respectively, the High Court dealt also with the following : Appeals from Assessments under the Taxation Assessment Act, 51, 25 ; Special cases stated for the opinion of the Full Court, 5, 19 ; Applications for Prohibitions, etc., 44, 41. The fees collected amounted to £3,544 in 1957 and £3,201 in 1958.

5. Commonwealth Industrial Court.—Information regarding the Commonwealth Industrial Court, which was established under the Conciliation and Arbitration Act 1904–1958, will be found in Chapter XII.—Labour, Wages and Prices.

#### § 4. Police, Prisons and Prisoners.

1. Police.—The primary duties of the police are to prevent crime, to detect and detain offenders, to protect life and property, to enforce the law, and to maintain peace and good order. In addition, they perform many duties in the service of the State, e.g. they act as clerks of petty sessions in small centres, as crown land bailiffs, foresters, mining wardens and inspectors under the fisheries and various other acts. In metropolitan and large country areas, they also regulate the street traffic. With the exception of a small body of Commonwealth police in the Northern Territory and the Australian Capital Territory, the police forces of Australia are under the control of the State governments, but their members perform certain functions for the Commonwealth government, such as acting as aliens registration officers and policing various acts and regulations.

Women police perform special duties at places where young women and girls are subject to moral danger, control traffic at school crossings, and lecture school children on road safety. They also assist male police as required in the performance of normal police duties.

The strength of the police force in each State and Territory, and the number of police officers per 10,000 of population, are shown in the following tables for the years 1953 to 1957. The figures include traffic police, probationers, cadets, special constables and women police, but exclude parking police, native trackers (natives employed in outlying districts in tracking lost persons and persons wanted by the police), female searchers, wadresses and interpreters. Figures refer to the 30th June, except where otherwise indicated.

#### STRENGTH OF POLICE FORCES.

As at 30th June—	N.S.W. (a)	Vic. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1953 .. ..	4,661	3,047	2,449	1,091	929	418	50	57	12,702
1954 .. ..	4,610	3,021	2,403	1,107	936	438	56	62	12,633
1955 .. ..	4,817	3,109	2,355	1,086	964	471	62	60	12,924
1956 .. ..	4,927	3,392	2,422	1,132	971	481	67	60	13,452
1957 .. ..	5,043	3,709	2,491	1,234	970	507	80	60	14,094

(a) Figures refer to the 31st December of the year shown.

The following table shows the population of each State and Territory to each police officer for the years 1953 to 1957.

#### POPULATION TO EACH POLICE OFFICER.

As at 30th June—	N.S.W. (a)	Vic. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1953 .. ..	731	793	527	711	668	727	317	521	701
1954 .. ..	751	821	549	720	684	705	294	502	720
1955 .. ..	732	813	571	744	683	668	284	558	721
1956 .. ..	728	776	566	738	698	665	273	602	706
1957 .. ..	726	728	561	708	713	647	240	652	689

(a) Figures refer to the 31st December of the year shown.

The following table shows the number of women police in each State and Territory for the years 1953 to 1957. As has been stated above, the figures are included in the table showing the strength of the police forces.

#### NUMBER OF POLICEWOMEN.

As at 30th June—	N.S.W. (a)	Vic. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1953 .. ..	36	28	9	18	8	5	..	2	106
1954 .. ..	37	30	9	9	5	..	..	3	113
1955 .. ..	37	34	8	20	9	5	..	2	115
1956 .. ..	36	43	7	23	9	8	..	2	128
1957 .. ..	38	55	7	24	9	10	..	2	145

(a) Figures refer to the 31st December of the year shown.

The following table shows the number of native trackers in each State and Territory for the years 1953 to 1957. As has been stated above, these figures are not included in the table showing the strength of the police forces. There are no native trackers in Tasmania, where the aboriginal race is extinct, nor in the Australian Capital Territory.

#### NUMBER OF NATIVE TRACKERS.

As at 30th June—	N.S.W. (a)	Vic. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1953 .. ..	11	1	24	..	23	..	30	..	89
1954 .. ..	7	1	24	..	18	..	28	..	78
1955 .. ..	8	1	23	..	18	..	29	..	79
1956 .. ..	8	1	25	(b)	7	..	31	..	72
1957 .. ..	8	1	23	(b)	3	..	30	..	65

(a) Figures refer to the 31st December of year shown. (b) One native tracker, who is paid a small weekly retainer and is supplied with rations, is continually on call.

2. **Prisons and Prison Accommodation.**—The table below shows the number of prisons in each State and the accommodation therein in 1957. All figures refer to the 30th June except where otherwise indicated.

#### PRISONS AND PRISON ACCOMMODATION, 1957.

Particulars.	N.S.W.	Vic. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
Prisons .. ..	17	11	7	16	19	1	2	73
Accommodation ..	(b)	1,915	916	856	876	186	59	(b)

(a) 31st December. (b) Not available.

There is no gaol in the Australian Capital Territory, but there is a lock-up consisting of five cells attached to the police station at Canberra, and another lock-up at Jervis Bay, where offenders are held while awaiting trial or serving short sentences not exceeding one week imposed by a Magistrate's Court.

3. **Convicted Prisoners.**—The number of convicted prisoners in each of the years 1953 to 1957 and the proportion per 10,000 of the population are shown in the following table. The figures exclude aborigines and debtors.

#### CONVICTED PRISONERS.

Year.	N.S.W. (a)	Vic. (b)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
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#### NUMBER.

1953 .. ..	2,135	1,173	538	(b) 413	374	154	44	4,831
1954 .. ..	2,155	1,186	606	(b) 377	360	152	47	4,883
1955 .. ..	2,238	1,295	580	413	386	163	50	5,125
1956 .. ..	2,860	1,564	612	457	482	149	21	6,145
1957 .. ..	3,050	1,572	680	569	488	162	29	6,550

#### NUMBER PER 10,000 OF POPULATION.

1953 .. ..	6.3	4.9	4.2	(b) 5.3	6.0	5.1	27.8	5.5
1954 .. ..	6.2	4.8	4.6	(b) 4.7	5.6	4.9	28.5	5.4
1955 .. ..	6.4	5.1	4.3	5.0	5.7	5.2	28.4	5.6
1956 .. ..	8.0	6.0	4.5	5.4	7.1	4.7	11.5	6.6
1957 .. ..	8.3	5.9	4.9	6.6	7.1	5.0	15.8	6.8

(a) Revised to include A.C.T. (b) 31st December of year shown.

### § 5. Cost of Administration of Law and Order.

1. **Expenditure by the States.**—The tables below show the net expenditure (i.e. gross expenditure less receipts from fees, fines, recoup for services rendered, etc.) from Consolidated Revenue during 1957–58 in connexion with the administration of justice, police and prisons in each State.

In South Australia, the receipts for legal fees and registrations exceed the expenditure under "Justice". Because of differing legislative and administrative arrangements in the various States, the activities covered by the figures shown are not exactly the same in each State. Small differences also result from differing accounting practices. However, the figures shown for individual States are comparable from year to year.

#### NET EXPENDITURE ON LAW AND ORDER, 1957–58.

State.	Net Expenditure.			Per Head of Population.		
	Justice.	Police.	Prisons.	Justice.	Police.	Prisons.
	£.	£.	£.	s. d.	s. d.	s. d.
New South Wales ..	934,188	6,721,317	1,096,604	5 1	36 9	6 0
Victoria .. ..	492,663	5,644,832	797,516	3 8	41 8	5 11
Queensland .. ..	66,042	3,412,274	260,208	0 11	48 8	3 9
South Australia ..	—89,221	1,734,074	282,990	—2 0	39 2	6 5
Western Australia ..	12,330	1,528,528	235,407	0 4	43 9	6 9
Tasmania .. ..	165,223	751,648	120,830	9 11	45 0	7 3
<b>Total .. ..</b>	<b>1,581,225</b>	<b>19,792,673</b>	<b>2,793,555</b>	<b>3 3</b>	<b>40 10</b>	<b>5 9</b>

2. **Commonwealth Expenditure.**—(i) *Police and Prisons.* The expenditure shown in the previous table is that incurred by the State Governments. Expenditure by the Commonwealth Government on police in the Australian Capital Territory and police and prisons in the Northern Territory is shown in the following table.

#### EXPENDITURE ON POLICE AND PRISONS IN THE NORTHERN TERRITORY AND THE AUSTRALIAN CAPITAL TERRITORY.

(£.)

Year.	Northern Territory.	Australian Capital Territory.(a)
1953–54 .. ..	108,726	86,413
1954–55 .. ..	135,738	87,126
1955–56 .. ..	145,387	98,720
1956–57 .. ..	136,000	109,710
1957–58 .. ..	208,099	142,462

(a) Expenditure on police only. There is no prison in the Australian Capital Territory.

(ii) *Attorney-General's Department.* Expenditure by the Commonwealth Attorney-General's Department throughout Australia is shown in the two tables which follow:—

#### EXPENDITURE BY THE COMMONWEALTH ATTORNEY-GENERAL'S DEPARTMENT.

(£.)

Year.	Gross Expenditure.	Receipts.	Net Expenditure.
1953–54 .. ..	1,549,991	321,683	1,228,308
1954–55 .. ..	1,715,945	370,759	1,345,186
1955–56 .. ..	1,896,741	407,474	1,489,267
1956–57 .. ..	1,952,184	451,758	1,500,426
1957–58 .. ..	1,984,776	516,090	1,468,686

**EXPENDITURE BY THE COMMONWEALTH ATTORNEY-GENERAL'S  
DEPARTMENT, 1957-58.**

Item.	Gross Expenditure. £.
Administration .. .. .	268,052
Bankruptcy .. .. .	169,720
Commonwealth Investigation Service .. .. .	126,206
Conciliation and Arbitration .. .. .	142,522
Court Reporting Branch .. .. .	95,962
Crown Solicitor's Office .. .. .	336,003
High Court .. .. .	111,023
Industrial Court .. .. .	76,383
Judges' Salaries and Pensions .. .. .	10,682
Legal Service Bureau .. .. .	63,727
Miscellaneous Services .. .. .	12,406
Patents, Trade Marks and Designs .. .. .	407,002
Peace Officer Guard .. .. .	79,205
Public Service Arbitrator's Office .. .. .	4,971
Rent .. .. .	65,030
Repairs and Maintenance .. .. .	15,882
<b>Total .. .. .</b>	<b>1,984,776</b>

In addition £397,070 was spent by the Attorney-General's Department on capital works and services.

(iii) *Receipts of Commonwealth Attorney-General's Department.*—The above items of expenditure are gross. Revenue received by the Commonwealth Attorney-General's Department, which offsets this expenditure to some extent, is shown in the following table :—

**RECEIPTS OF THE COMMONWEALTH ATTORNEY-GENERAL'S  
DEPARTMENT, 1957-58.**

Item.	Amount. (£.)
Bankruptcy .. .. .	97,729
Court Reporting Branch .. .. .	54,695
Fees, Fines and Costs of Court .. .. .	28,156
Patents, Trade Marks and Designs, Copyright .. .. .	317,824
Miscellaneous .. .. .	17,686
<b>Total .. .. .</b>	<b>516,090</b>

## CHAPTER XVII.

## PUBLIC HEALTH.

## A. STATE GOVERNMENT ACTIVITIES

(including activities of the Commonwealth Government in the Northern Territory and the Australian Capital Territory).

## § 1. Public Health Legislation and Administration.

1. *New South Wales.*—The Department of Public Health comes under the jurisdiction of the Minister for Health, with an Under-Secretary as Permanent Head of the Department for administrative purposes.

There is also a Director-General of Public Health and Chief Medical Adviser to the Government, who is *ex officio* President of the Board of Health and Chairman of the Nurses' Registration Board.

The Inspector-General of Mental Hospitals is responsible for the administration of that part of the Lunacy Act relating to the care and treatment of mental patients.

The Department's activities embrace all matters relating to public health and the greater part of the general medical work of the Government. These include:—*(a)* Supervision of the work of local authorities (municipal and shire councils) in relation to public health matters connected with the following Acts—Public Health Act, Noxious Trades Act and Pure Food Act; *(b)* Scientific divisions (Government Analyst, Microbiological Laboratory, and Division of Industrial Hygiene); *(c)* Tuberculosis and Social Hygiene Divisions; *(d)* Medical Officers of Health at Sydney, Broken Hill, Newcastle, Wollongong, Bathurst and Lismore; *(e)* State hospitals and homes and State sanatoria; *(f)* Mental hospitals; *(g)* Public hospitals (Hospitals Commission); *(h)* Maternal and baby welfare (Baby health centres); *(i)* School medical and dental services; and *(j)* Publicity, nutrition and library services.

2. *Victoria.*—The Department of Health comprises four branches, the General Health Branch, the Maternal and Child Hygiene Branch, the Tuberculosis Branch and the Mental Hygiene Branch. The work of these branches is described below.

*(a) The General Health Branch.* The Branch, which, *inter alia*, is the administrative branch for the Commission of Public Health, protects or promotes the health of the community in the following ways:—

The Engineering Division scrutinizes from a Public Health point of view the plans of all public buildings and provincial sewerage installations and makes periodical inspections. Other activities include prevention of stream pollution and supervision of abattoirs and cattle sale yards.

The Poliomyelitis Division retains a panel of specialists to assist in diagnosis. It also provides a comprehensive orthopaedic, physiotherapy and respirator service for all eligible patients and carries out rehabilitation in conjunction with the Commonwealth Government. Immunization, in conjunction with municipalities, against poliomyelitis, diphtheria, whooping cough, tetanus and smallpox is encouraged and supervised.

The incidence of all notifiable diseases is recorded and the branch maintains an Epidemiological Research Laboratory.

Patients with venereal diseases are treated at a central clinic; patients with Hansen's disease are admitted to a special hospital maintained by the Branch; and assistance in diagnosing and treating industrial diseases is given by the Industrial Hygiene Division.

The labelling and contents of foods and drugs (particularly proprietary medicines) are closely supervised.

Subsidies are granted to municipalities to provide meals for pensioners, clubs for elderly citizens, and emergency housekeeper services to assist families over certain domestic crises.

Other services operated by the Branch are: registering plumbers and gasfitters; providing free travel to hospitals for people with limited incomes; analysing food, drink, water and sewage effluents; registering cinematograph operators; administering the Cemeteries Acts and the Clean Air Act; and advising industry on health hazards associated with handling radioactive substances.

*(b) The Maternal and Child Hygiene Branch.* This branch is concerned with pre-natal hygiene, the development of pre-school services, and the school medical and dental services.

*(c) The Tuberculosis Branch.* The Tuberculosis Branch, under the control of a Director of Tuberculosis, combats the spread of tuberculosis. Using improved diagnostic facilities and better methods of treatment, it has been possible to reduce greatly the incidence of this disease. There is no waiting list for patients to enter any of the Institutions under the control of the Tuberculosis Service.

(d) *The Mental Hygiene Branch.*—This Branch is under the control of a Mental Hygiene Authority consisting of two medical practitioners, one each appointed as Chairman and Deputy Chairman, and a layman with administrative skill and experience. The Authority, since its appointment in 1951, has concentrated on improving existing facilities for treatment but owing to the steadily increasing population of the State, it must also provide additional accommodation each year.

Out-patient psychiatric services are being extended and provision is being made for day hospitals and night hospitals as a means of reducing the demand on institutional beds.

The Cancer Institute, set up in 1949 under the provisions of the Cancer Institute Act, is developing its services to provide specialised Radiotherapy treatment facilities for the State of Victoria. Co-operation in varying degrees and definition exists between the Institute and major metropolitan Hospitals, and Clinics have been opened in seventeen country centres in co-operation with country Base Hospitals.

Under an agreement with the Government of Tasmania, Clinics are also conducted at Launceston and Hobart.

A 4 mega-volt linear accelerator installed in 1956, is now operating at full capacity and further mega-voltage equipment is planned for the near future. Out-patient attendances during the twelve months ended 30th June, 1958, were 24,300, whilst X-ray therapy treatment administered totalled 80,000. Seventy in-patient beds are at present provided and further accommodation will be provided early in 1959, when a new Out-patient Department and Ward Block is opened.

3. *Queensland.*—(i) *General.* The Health Acts 1937 to 1955 are administered by the Director-General of Health and Medical Services subject to the Minister for Health and Home Affairs. A central staff controls the following divisions:—

(a) *Division of Public Health Supervision.* This Division is controlled by the Deputy Director-General of Health and Medical Services and comprises separate sections of environmental sanitation, food and drug control, enthetic (venereal) diseases, hookworm control and Hansen's disease (leprosy) control. Two institutions (one at Peel Island in Moreton Bay for white patients and one at Fantome Island near Townsville for aboriginal patients) are maintained for the treatment of Hansen's disease. Modern therapy has caused a decline in numbers of patients at these institutions. Free treatment of venereal diseases is offered at the Department's clinics in Brisbane, and at any public hospital. Free immunization against poliomyelitis, diphtheria, whooping cough and tetanus is offered by most of the local authorities. About 94 per cent. of school children in the Greater Brisbane area and 90 per cent. in the rest of the State have been immunized against diphtheria, while a somewhat higher proportion has been immunized against poliomyelitis.

(b) *Division of Tuberculosis.* A central chest clinic in Brisbane offers Mantoux tests, X-ray examinations, and inoculations of Mantoux negative reactors free of charge and this service is extensively used. Mobile X-ray units visit country districts. Children in the final grade of primary schools are now being Mantoux-tested and given B.C.G. vaccine. There is provision for compulsory X-ray examination of all persons over the age of 14 years upon proclamation by the Governor-in-Council.

(c) *Division of Industrial Medicine.* This Division exercises supervision over the health of workers in both primary and secondary industries, including control of leptospirosis (Weil's disease), scrub typhus and other fevers of occupational origin in the sugar-cane growing districts north of Ingham.

(d) *Division of Maternal and Child Welfare.* This Division offers supervision and advice on the rearing and health of infants and pre-school children at 235 baby health centres throughout the State. Outlying centres are visited by air or by special rail car. Homes for in-patient treatment of infants with feeding problems have been established at Brisbane, Toowoomba, Ipswich and Rockhampton.

(e) *Division of School Health Service.* This Division comprises the Chief Medical Officer, School Health Services, and a staff of doctors, dentists and visiting school nurses. Every child has a medical examination at least once in three years.

(f) *Division of Mental Hygiene.* The Director is responsible for the care and treatment of mentally sick patients in the State's four mental hospitals at Brisbane, Toowoomba, Ipswich and Charters Towers.

(g) *Division of Laboratory Services.* Two laboratories—the Laboratory of Microbiology and Pathology and the Government Chemical Laboratory—are maintained to ensure the purity of a wide range of foodstuffs and materials. The former also offers a service in clinical pathology to institutions, country hospitals and private doctors.

(ii) *Hospitals.* All public hospitals operate under the district system, which provides for the constitution of hospitals regions and hospitals districts and a hospitals board for each district. The State is divided into 11 hospitals regions with a base hospital for each region which comprises a number of hospitals districts. The purpose of the regional scheme is to co-ordinate the public hospitals in the region with the base hospital. The administration of the hospital services, including public dental services, in each hospitals

district is vested in the hospitals board, which comprises not less than four members nor more than eight members appointed by the Governor-in-Council and one member elected by the component local authorities. There are 56 hospitals boards controlling 140 public hospitals.

Private hospitals in Queensland are controlled under the provisions of the "Health Acts 1937 to 1955" and the "Private Hospital Regulations 1937". There are 59 private hospitals licensed in the State, containing 1,722 beds and eight cots, of which 21, containing 791 beds and three cots, are in Brisbane.

4. **South Australia.**—The Department of Public Health embraces the activities of the Central Board of Health, the Food Drugs Advisory Committee, the Radiological Advisory Committee, the School Medical and Dental Services, Poliomyelitis Services, Deafness Guidance Clinic and the public health aspect of the control of tuberculosis, including the State X-ray Health Survey, under the control of the Director of Tuberculosis.

The Central Board of Health consists of five members, three of whom (including the chairman) are appointed by the Governor while one is elected by metropolitan local boards and one by all other local boards. The Central Board of Health administers the Health, Food and Drugs, Dangerous Drugs, Noxious Trades, Bakehouses Registrations and Early Notification of Birth Acts. The Board is also concerned to some degree with Acts relating to local government, abattoirs and cremation. Other legislation administered by the Department of Public Health relates to venereal diseases and vaccination.

The Health Act 1935-1956 constitutes every municipal council and every district council a local board of health for its municipality or district. There are 143 local boards under the general control and supervision of the Central Board. Under the Food and Drugs Act, each local board is constituted the local authority for its respective district, except in the metropolitan area, for which the Metropolitan County Board is the local authority.

5. **Western Australia.**—Health services are provided under the Health Act 1911-1957. The central authority is the Department of Public Health, controlled by a Commissioner, who must be a qualified medical practitioner. The State is divided into 147 local government areas which are administered by either municipal councils or road boards. Each type of authority has health administration powers.

In any emergency, the Commissioner may exercise all the powers of a health authority in any part of the State.

Features of recent legislation are as follows:—(a) Act No. 70 of 1948 gives power to control sufferers from tuberculosis and established a Tuberculosis Control Branch; (b) Act No. 11 of 1952 gives wide powers to regulate the sale and use of pesticides; (c) Act No. 34 of 1954 provides for the licensing of manufacturers of therapeutic substances; (d) Act No. 21 of 1957 gives power to require the notification of any prescribed condition of health in addition to infectious diseases; and (e) Act No. 17 of 1956 gives local authorities power to provide or subsidize centres for the accommodation and care of the aged.

6. **Tasmania.**—The Department of Health Services is under the jurisdiction of the Minister for Health. The Department consists of a Headquarters and three Divisions. The Director-General of Health Services is the permanent head of the Department and he administers the Department through Directors of each of the three divisions (Division of Public Health, Division of Mental Health, and Division of Tuberculosis) and through several other clinical directors and other senior officers attached to the Headquarters of the Department including the Directors of Orthopaedics, Pathology and Anaesthetics and the Government Analyst and Chemist.

In addition to his responsibility for the function of the Department as a whole, the Director-General of Health Services directly administers the various branches of the work performed by Headquarters. This is concerned particularly with the following:—

- (a) The Administration of the Hospital Services throughout the State.
- (b) The Government Medical Service.
- (c) The Hospital and Government Nursing Service, which includes the administration of 27 District Nursing Centres throughout the State.
- (d) Legislation concerned with Health and allied matters and the Nurses' Registration Board.
- (e) The Health Education Council and National Fitness Council.
- (f) Specialist Medical Services.
- (g) Statistical classification of Diseases and Injuries.
- (h) Liaison with other States and the Commonwealth Health Department, and all matters dealing with the maintenance of Departmental property and the appointments and salaries of Departmental staff.

The Division of Public Health administers laws relating to sanitation, notification of infectious diseases and food and drug legislation. The Division also controls the school medical and dental services and child health services.

The Division of Mental Health is responsible for the supervision of mental hospitals, the consultative diagnosis and treatment of psychiatric cases, the treatment and care of the mentally ill, the treatment and care of inebriates, the treatment and custody of sexual offenders, the treatment of psychopathic cases, and the care and treatment of retarded children. The Tuberculosis Division is concerned with the prevention (including B.C.G. vaccination), detection, notification, examination and treatment of all forms of tuberculosis occurring in the State. This Division also conducts the compulsory mass chest-X-ray examinations and maintains chest hospitals and diagnostic clinics.

7. Northern Territory.—The Commonwealth Department of Health provides hospital health and medical services in the Northern Territory.

Four general hospitals have been established. The Darwin Hospital has accommodation for 224 in-patients, Alice Springs Hospital, 117, Katherine Hospital, 36, and Tennant Creek Hospital, 34. The treatment of Hansen's disease (leprosy) is carried out at East Arm Settlement. A full range of ancillary services is available at the Darwin hospital which serves as a base hospital for the Territory. Dental clinics have been set up at Darwin and Alice Springs.

Medical and dental services to outback areas are provided by road and air. Aircraft used in the Territory are two De Havilland Doves stationed at Darwin, and one Drovcr at Alice Springs. They are staffed and serviced by Trans-Australia Airlines and are extensively used in ambulance and survey medical work. At Alice Springs, doctors of the Northern Territory provide the medical services to the Royal Flying Doctor Service (South Australian) base.

A section of the Department of Health undertakes continuous investigation into native health.

School doctors and dentists move throughout the area diagnosing and treating. Public health services are provided and health inspectors periodically visit all settlements.

Darwin, as a first port of entry for oversea aircraft and shipping, has a quarantine station.

8. Australian Capital Territory.—The Public Health Ordinance 1928–1930 placed under the control of the Minister for Health all matters relating to public health and hygiene in the Australian Capital Territory. The Minister has appointed a Medical Officer of Health and a number of Health Inspectors to administer and police this ordinance. The Canberra Community Hospital is administered subject to the Minister for Health by a board consisting of five elected members and three members appointed by the Minister. The hospital has accommodation for 253 in-patients. A district nursing service administered by the Commonwealth Department of Health was established in 1950 to provide a home-nursing service for the sick and aged. The service is available at the request of a registered doctor.

## § 2. Supervision and Care of Infant Life.

1. General.—The number of infant deaths and the rate of infant mortality for the five years 1953 to 1957 are given in the following table. Further information regarding infant mortality (including information for each State as a whole and for the Territories) will be found in Chapter X.—Vital Statistics.

### INFANT DEATHS AND DEATH RATES.

State.	Metropolitan.					Remainder of State.				
	1953.	1954.	1955.	1956.	1957.	1953.	1954.	1955.	1956.	1957.
<b>NUMBER OF INFANT DEATHS.</b>										
New South Wales	620	787	814	784	795	1,226	1,063	1,036	993	1,009
Victoria ..	544	576	549	630	703	589	479	486	498	516
Queensland ..	228	206	210	224	224	541	489	446	513	508
South Australia ..	196	199	207	193	202	179	189	224	184	201
Western Australia	180	153	187	156	168	198	206	186	228	189
Tasmania ..	51	58	55	53	51	126	128	134	117	119
Total(a) ..	1,819	1,979	2,022	2,040	2,143	2,859	2,554	2,512	2,533	2,542
<b>RATE OF INFANT MORTALITY.(b)</b>										
New South Wales	21.45	22.51	22.76	21.33	20.40	26.66	27.85	26.81	25.49	24.92
Victoria ..	19.56	18.26	16.68	18.13	19.39	22.88	20.72	20.75	21.07	21.32
Queensland ..	21.02	18.95	18.60	19.93	18.88	27.14	24.08	21.17	24.23	23.20
South Australia ..	19.71	19.82	20.13	18.47	18.85	21.79	23.08	27.27	21.61	22.79
Western Australia	23.28	19.59	22.50	17.89	19.63	24.36	25.37	22.37	27.82	22.59
Tasmania ..	22.16	25.45	23.10	22.18	19.97	23.18	23.31	23.48	20.48	20.23
Total(a) ..	20.78	20.30	20.03	19.56	19.68	25.23	24.70	23.84	23.85	23.18

(a) Excludes Territories.

(b) Number of deaths of children under one year of age per 1,000 live births registered.

Because the health of mothers and infants depends largely on pre-natal attention as well as after-care, government and private organizations provide instruction and treatment for mothers before and after confinement. The health and well-being of mother and child are looked after by the institution of baby health centres, baby clinics, crèches, etc.

In all States, Acts have been passed with the object of supervising the conditions of infant life and reducing the rate of mortality. Departments control the boarding-out to suitable persons of the wards of the State, and wherever possible the child is boarded out to its mother or to a near female relative. Stringent conditions regulate the adoption, nursing and maintenance of children placed in foster-homes by private persons, while special attention is devoted to the welfare of ex-nuptial children. (See also in this connexion Chapter XVIII—Welfare Services.)

Under the provisions of Part V. of the Social Services Act 1947–1958, a sum of £15 is payable to the mother in respect of each confinement at which a living or viable child is born if the mother has no other children under 16 years of age. Where there are one or two other children under 16 the amount payable is £16, and where there are three or more other children under 16 the amount payable is £17 10s. Where more than one child is born at a birth the amount of the allowance is increased by £5 in respect of each additional child born at that birth. More detailed information concerning maternity allowances is given in Chapter XVIII.—Welfare Services.

2. Nursing Activities.—(i) *General.* In several of the States, the Government maintains institutions which provide treatment for mothers and children, and, in addition, subsidies are granted to various associations engaged in welfare work.

(ii) *Details by States.* In earlier issues of the Official Year Book (see No. 22, pp. 515–6) information concerning the activities of institutions in each State is given.

(iii) *Summary.* The following table gives particulars of the activities of Baby Health Centres and Bush Nursing Associations for the year 1958.

**BABY HEALTH CENTRES AND BUSH NURSING ASSOCIATIONS, 1958.**

Heading.	N.S.W.	Vic.	Qld. (a)	S. Aust. (a)	W.Aust.	Tas.	N.T.	A.C.T. (a)	Aus- tralia.
Baby Health Centres— Metropolitan No.	108	163	63	88	31	18	..	9	480
Urban-Provincial and Rural No.	242 (b)	418	172	143	28	72	2	..	1,077
Total No.	350	581	235	231	59	90	2	9	1,557
Attendances at Centres No.	1,049,039	1,289,497	443,696	228,575	218,134	130,045	8,631	29,000	3,396,617
Visits paid by Nurses No.	28,234	145,949	29,218	25,167	23,330	72,745	1,800	3,835	330,278
Bush Nursing Associa- tions—Number of Centres ..	26	59	7	35	12	26	..	..	165

(a) Year ended 30th June. (b) Includes 7 mobile units which served 20 centres.

In the last twenty-five years, the number of attendances at the Baby Health Centres has more than trebled. The numbers of attendances, at five-year intervals, since 1930 were as follows :—1930, 919,893 ; 1935, 1,355,306 ; 1940, 2,035,299 ; 1945, 2,927,764 ; 1950, 3,049,375; and 1955, 3,099,233. During the year 1958, the number of attendances was 3,396,617.

**§ 3. Medical Inspection of School Children.**

1. *General.*—Medical inspection of school children is carried out in all States, in the Northern Territory and in the Australian Capital Territory. Medical staffs have been organized, and in some States travelling clinics have been established to deal with dental and ocular defects.

2. *New South Wales.*—(i) *School Medical Service.* Doctors of the School Medical Service examine children attending all schools administered by the Department of Education and the majority of other schools in the State. They make annual visits to schools in the metropolitan, Newcastle and Wollongong areas, and in Armidale, Tamworth, Bathurst, Orange and Wagga, and examine children in kindergarten or 1st grade in primary schools and 1st and 4th years in secondary schools. Children in other classes are examined or reviewed, as necessary. The vision and hearing of pupils in 4th grade are re-tested. In country areas, doctors aim to visit schools every three years, and examine all children attending. Owing to insufficient staff, the country portion of the programme cannot be completed each year.

If treatment is necessary, the parent is informed in writing and, if possible, is called in for interview. In the metropolitan, Newcastle and Wollongong areas, school nurses follow up these cases with the object of persuading parents to seek medical advice.

As well as examining school children, the medical officer examines the sanitary arrangements at each school. Bush nurses act as school nurses in schools at or near the bush nursing centres and carry out a limited inspection for defects or unhygienic conditions.

Medical officers of this service examined 162,945 children in 1956 and 130,495 in 1957. Notifiable defects were found in 24.5 per cent. of the children examined.

Various surveys of school children are undertaken from time to time, e.g. hearing surveys, hookworm surveys, height-weight surveys, nutrition surveys, and investigations to determine the incidence of enlargement of the thyroid gland, defective vision, postural defects.

Five child guidance clinics, all in the metropolitan area, operate under the administration of the school medical service. One clinic functions at the Yasmarr Boys' Shelter and deals exclusively with cases before the Children's Courts. Each clinic is staffed by a psychiatrist, a psychologist and social workers.

(ii) *School Dental Service.* The aim of the School Dental Service is to provide dental treatment for children on school premises, to train them in the care of their teeth, and to teach them the principles of dental health.

Of 32,993 children examined in both city and country schools in 1957, 30,077 were included in a Dental Health Survey. Of these, six per cent. were found to have naturally healthy dentitions, and 77 per cent., were in need of treatment.

In 1957, the clinics treated 15,920 children in 45,397 visits; 25,352 teeth were extracted, 36,827 permanent fillings and 46,704 other treatments, including prophylaxis, were provided. As the number of clinics is not sufficient to provide more than a limited service, it is necessary to restrict treatment to the ages 6–8 years in the metropolitan area, and 6–9 years in large country centres. In small outlying rural schools, children of all ages are included.

3. *Victoria.*—The School Medical and Dental Services are gradually being extended throughout the State. The objective of the medical services is to ensure that each child is examined to ascertain any physical defects at least once in every three years of school life. Parents are informed of any defects and told how treatment may best be obtained. In 1957, approximately 75,000 children were examined, 56 per cent. of them being in the metropolitan area. Nurses perform valuable follow-up work in interviewing parents to ensure that, as far as possible, recommended treatment is carried out. At the end of 1957, 31 doctors and 38 nurses were employed in this service.

The school dental service provides dental treatment for children attending primary schools and resident in institutions in certain parts of the State. Country schools are visited by mobile dental units. Nine dental vans and six semi-trailer (two-surgery) units are operating in the mobile service. The dental service has a staff of 39 dentists and 37 dental attendants. During 1957, 39,351 children attending 489 schools were examined and all necessary dental treatment carried out. This treatment included approximately 36,000 extractions and 58,000 fillings.

4. *Queensland.*—During 1957–58, medical officers and nurses examined 24,618 school children, referring children with defects to their own doctors. In western Queensland, local doctors act as part-time ophthalmic officers. In North Queensland, two school sisters assist in the control of hookworm. Advice is given on school sanitation, infectious diseases in schools, and health education.

During 1957–58, school dentists gave treatment to 8,725 school children whose parents could not afford private treatment. The treatment was carried out at four rail dental clinics and with portable equipment at schools. In addition, school children are treated at hospital dental clinics in the larger towns.

5. *South Australia.*—Children in State schools are examined while in Grades 1, 4 and 7 in the primary schools, and in their second and fourth years in secondary schools. Efforts are made to visit country schools every three years and all the children are examined. Students who wish to become teachers are examined on appointment as Leaving Teaching Scholars while still attending secondary schools, again immediately prior to entering the Teachers' College and finally when they leave the college to take up teaching. Courses of lectures in hygiene and in first aid are given to all College students and, in addition, domestic arts students are lectured on home nursing.

During 1957, 52,323 children were examined by medical officers in 127 country and 107 metropolitan schools. Of these, 3,255 required notices for defective vision, 944 for defective hearing, and 15,746 for dental disorders.

714 children were examined at the deafness guidance clinic during 1957. Of the 430 new patients, 374 were referred to doctors or hospitals for treatment.

Educational work was assisted by talks to mothers' clubs and interviews with parents by doctors and dentists, and by home visits and interviews by nurses.

The Psychology Branch examines difficult children of many types, including those with such problems as backwardness, truancy and delinquency, and assists the parents of the children interviewed in handling these problems. In addition to supervising opportunity and special classes for children who are hard-of-hearing or backward in school work, it advises on questions of placement and types of education for ordinary children. Its guidance officers organize vocational guidance work in schools, interview pupils and visit schools. They also lecture to students of the Teachers' College as well as to other interested organizations such as mothers' clubs. Expenditure of the Psychology Branch was £22,985 during 1958 and £21,985 during 1957.

6. **Western Australia.**—Under the Health Act, 1911-1957, the medical officers appointed by the local authorities became medical officers of schools and of school children. In the Health Department, there are four full-time medical officers for schools, who during 1957 examined 35,093 children (metropolitan 21,155, country 13,938) of whom 18,108 were boys and 16,985 girls. The 239 schools visited comprised—Metropolitan: 75 government, 35 convent and 1 kindergarten; Country: 96 government, 30 convent and 2 kindergarten. The aim is to examine every school child once every two years.

During 1957, the 14 full-time dentists employed visited 16 metropolitan schools, 152 country schools, 11 orphanages and 9 native missions. The number of children examined was 12,364. With the consent of their parents, 7,311 of these were treated. The cost of this service for 1956-57 was £74,571.

7. **Tasmania.**—During 1957, two full-time and four part-time medical officers examined school children in State and private schools, and 13 full-time and 2 part-time sisters visited homes and schools. Of the 23,613 children examined by medical officers, 8,762 were found to have defects.

There are 20 school dental clinics. Surgeries are located at Hobart, Launceston, Queenstown, Burnie and Devonport, and 15 mobile clinics are operated in other districts. A full-time dental surgeon is in charge of each surgery or clinic. During the year, there were 19,270 new visits to the school dentists and 29,290 repeat visits.

The cost of the school medical and school dental services for the year ended 30th June, 1957, was £73,263.

8. **Northern Territory.**—(i) *School Medical Service.* The Schools Medical Officer makes routine physical examinations of all children attending both pre-school centres and the schools which come under the supervision of the Assistant Supervisor of Education in the Northern Territory. The only children not examined by him are those at the Native Welfare Settlement School, i.e. full-blood aboriginals, who are examined during native health surveys.

Children attending pre-school centres are examined once a year if possible, and all new entrants are examined. The aim is to provide a medical examination for all children attending primary and secondary school at least three times during their school life—on entry, about two years later, and before they leave school.

An immunization clinic is held one afternoon a week at the Darwin Hospital by the Schools Medical Officer. He also conducts a paediatric clinic at the hospital one afternoon a week, and is responsible for procedures in connexion with the Salk anti-poliomyelitis immunization campaign.

During the long summer holidays, the services of the Schools Medical Officer are used on relieving work at the Darwin hospital and on general supervision at the infant welfare clinic in Darwin.

(ii) *School Dental Service.* A special service for school and pre-school children is available in Darwin. Each dentist is required to work in the infant school clinic for four months a year. At present, only pre-school and infant school children are treated every year. Children from primary, secondary and denominational schools are treated at longer intervals, but emergency treatment is available for them at the main Darwin clinic.

9. **Australian Capital Territory.**—The Commonwealth Department of Health is responsible for health aspects of child welfare in the Australian Capital Territory. These include a school medical service, carried out by a medical officer and a trained nurse, who are full time officers of the Health Department.

Routine examinations are carried out at all schools, public and private, within the Territory. The programme is planned to provide for examinations at the ages of six, eight, 12, 15 and 17 years. During 1958, the total number of children examined in the above age groups was 3,166.

Examinations of children attending Pre-School Centres are made according to the time available, an attempt being made to cover children aged 4½ to five years. In 1958, lack of time prevented full coverage, but 139 pre-school children were examined.

In addition, an immunization programme for the protection of children, aged from six months to 12 years, against diphtheria, whooping cough and tetanus is carried out by the school doctor and nurse. Injections given during 1958 numbered 3,386.

The officer-in-charge of the school service also acts as medical adviser to the Mothercraft Council.

The school dental service is staffed by seven dentists and eight dental nurses, and has operated since 1950. The service provides free dental treatment to children at primary and infants' schools and pre-school centres, whose parents give permission for them to receive treatment. Approximately 90 per cent. of children accept treatment. During 1958, 5,529 children were examined, involving 16,324 visits by these children.

#### § 4. Inspection of Food and Drugs for Sale.

Public health legislation in force in all States provides for the inspection of foods and drugs with the object of ensuring that all goods sold shall be wholesome, clean and free from contamination or adulteration, and that all receptacles, places and vehicles used for their manufacture, storage or carriage shall be clean.

#### § 5. Supervision of Dairies, Milk Supply, etc.

Earlier issues of the Official Year Book (*see* No. 22, p. 498), refer to the legislation in force in the various States to ensure the purity of dairy produce.

#### § 6. Disposal of the Dead by Cremation.

The first crematorium in Australia was opened in South Australia in 1903. At 31st December, 1958, there were sixteen crematoria in Australia, situated as follows:—

##### CREMATORIA, 31st DECEMBER, 1958.

New South Wales	..	..	..	..	..	6
Victoria	..	..	..	..	..	3
Queensland	..	..	..	..	..	2
South Australia	..	..	..	..	..	2
Western Australia	..	..	..	..	..	1
Tasmania	..	..	..	..	..	2
<b>Australia</b>	..	..	..	..	..	<b>16</b>

There is no crematorium in the Northern Territory or the Australian Capital Territory.

The following table shows the number of cremations in each State for each of the years 1954 to 1958:—

##### CREMATIONS.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1954 .. ..	10,962	5,593	2,879	(a) 309	1,007	573	21,323
1955 .. ..	11,128	6,119	2,993	431	1,169	549	22,389
1956 .. ..	12,358	6,733	3,341	514	1,201	551	24,698
1957 .. ..	12,189	6,849	3,250	539	1,239	688	24,754
1958 .. ..	12,190	6,913	3,308	620	1,363	622	25,016

(a) Year ended 30th June.

**B. COMMONWEALTH GOVERNMENT ACTIVITIES.****§ 1. General.**

At the time of federation, the only health function given to the Commonwealth Government under the Constitution was the power to make laws with respect to quarantine. All other health powers remained with the State Governments. Under this power, the systems of State quarantine formerly in operation were abolished with the passing of the Quarantine Act 1908 and a branch of the Department of Trade and Customs, under the control of a Director of Quarantine, was created on the 1st July, 1909.

The Commonwealth Department of Health was formed in 1921 by the extension and development of the quarantine service, the Director of Quarantine becoming the Director-General of Health. It had certain other functions in the field of public health. An amendment to the Constitution in 1946 gave the Commonwealth power to make laws with respect to pharmaceutical, hospital and sickness benefits, and medical and dental services. In addition, the Commonwealth Government has used its powers under Section 96 of the Constitution to make grants to the States for health purposes.

**§ 2. National Health Benefits.**

**1. Pharmaceutical Benefits.**—Under the provisions of the National Health Act 1953–1958, certain life-saving and disease-preventing drugs are provided free of charge to the general community if they have been prescribed by a doctor registered in Australia.

The number of drugs listed as available as general pharmaceutical benefits has steadily increased. At 30th June, 1958, 247 separate preparations were supplied. Before a drug is listed as being available, it must be approved by the Pharmaceutical Benefits Advisory Committee, a body appointed by the Minister for Health.

All drugs listed in the British Pharmacopoeia, and other drugs as specified, are supplied free to persons who benefit under the pensioner medical service (*see* para. 5, p. 646).

Total expenditure on pharmaceutical benefits in the year 1957–58 was £15,033,989.

**2. Hospital Benefits.**—The payment of hospital benefits to the States is authorized under Part V. of the National Health Act 1953–1958. This Act continues the agreements entered into with the various States under the Hospital Benefits Act 1951. Under these agreements, the Commonwealth pays the States certain sums of money which vary according to the number of occupied beds in public hospitals and the status of patients.

The agreements provide for the payment of 12s. a day for patients who are pensioners or their dependants, and for patients in certain South Australian hospitals. The rate of 8s. a day is paid for other patients.

The National Health Act also provides for the payment of 8s. a day for patients in approved private hospitals. This payment is made to the proprietor of the private hospital. A condition of the benefit is that an equivalent amount has been allowed against the patient's account.

Commonwealth additional benefit is paid in the case of patients who are members of a registered hospital benefit organization. The additional benefit is payable at the rate of 4s. a day if a person contributes for a fund benefit of at least 6s. a day but less than 16s. a day, and at the rate of 12s. a day if a person contributes for a fund benefit of at least 16s. a day. Payment of the additional benefit is made through the benefit organization and the patient normally receives it with the amount of fund benefit payable by the organization. Reimbursement of the Commonwealth additional benefit is subsequently made to the organization by the Commonwealth.

Until 1st January, 1959, organizations' rules generally provided for disallowance of claims for fund benefit in cases of chronic or pre-existing ailments and long-term illnesses. As from 1st January, 1959, provision has been made for fund benefit to be paid in these cases where the treatment is in a recognized hospital. The fund benefit generally payable in such cases is 16s. a day and is paid from special accounts guaranteed by the Commonwealth or from the ordinary accounts of the organizations.

Australian residents and their dependants who receive hospital treatment while temporarily living overseas are eligible to receive the benefit of 8s. a day and the additional benefit to which they are entitled.

Expenditure on hospital benefits in 1957–58 was £10,823,096. This does not include expenditure on mental hospitals (*see* para. 3, below).

The following tables show the amount of ordinary benefit paid for each of the years 1955-56 to 1957-58 together with the number of registered organizations, the membership thereof, and payments of Commonwealth additional benefit and hospital fund benefit on account of occupied beds in public and approved private hospitals for the year 1957-58. As many persons contribute on behalf of both themselves and their dependants, the total number of persons covered by hospital benefit schemes is considerably higher than the number of members. Reliable figures for coverage are not available.

### HOSPITAL BENEFITS : SUMMARY 1955-56 to 1957-58.

#### 1. Ordinary Benefits (a). Payable to Hospitals in respect of occupied beds.

(£.)

Year Ended 30th June.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Territories and Overseas.	Australia.
1956 .. ..	3,112,037	1,896,789	1,308,000	665,000	617,979	255,668	58,757	7,914,230
1957 .. ..	3,065,921	1,920,075	1,356,017	714,980	594,007	264,227	57,936	7,973,163
1958 .. ..	2,832,282	2,024,597	1,415,169	735,079	644,149	276,378	63,498	7,991,152

(a) Ordinary benefits are payable in respect of :—(i) Beds occupied by pensioners in public hospitals (12s. a day) ; (ii) Beds occupied in certain South Australian hospitals (12s. a day) ; and (iii) Other occupied beds in public hospitals and approved private hospitals (8s. a day).

#### 2. Additional Benefits (a). Payable through Benefit Organizations.

YEAR ENDED 30TH JUNE, 1958.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.(b)
Registered Organizations	No. 28	51	3	14	13	10	119
Members	No. 1,064,925	679,700	253,154	217,428	201,768	97,199	2,514,174
Commonwealth Benefit	£ 1,480,299	637,042	144,520	193,240	285,032	91,811	2,831,944
Fund Benefit	£ 4,509,044	1,220,574	728,006	639,530	618,576	421,078	8,136,808

(a) An additional benefit of 4s. a day is payable to registered hospital benefit organizations for persons who contribute for a fund benefit of at least 6s. a day but less than 16s. a day, or 12s. a day for those who contribute for a fund benefit of at least 16s. a day. (b) No hospital benefit organization is registered in the Northern Territory or the Australian Capital Territory. Persons who live in one of these territories, or who are overseas, receive their Commonwealth additional benefit and fund benefit through membership of an organization registered in one of the States.

3. **Mental Hospitals.** In 1946, when Commonwealth hospital benefits were introduced for patients in public hospitals, no provision was made for patients in mental hospitals. To help meet the cost of maintaining patients in mental hospitals, the Commonwealth Parliament passed the Mental Institutions Benefits Act 1948. This Act ratified agreements with the States whereunder it was provided that:—

(a) the Commonwealth would pay the States a benefit equal to the amount being collected by the States from the relatives of patients in mental hospitals by way of charges for maintenance; and

(b) the States would cease making charges for the maintenance of mental patients.

These agreements operated for five years, and terminated in the latter half of 1954. The amount contributed by the Commonwealth during the operation of the agreements was approximately one shilling a day for each patient. When the agreements terminated, Dr. Alan Stoffer, of the Victorian Mental Hygiene Authority, was commissioned to undertake a survey on mental health facilities and needs in Australia. His report was released in May, 1955. The report stated that serious overcrowding existed in the majority of mental hospitals in Australia. The provision of more beds was the most urgent need, but other accommodation and rehabilitation facilities were also required.

Following the report, the Commonwealth made an offer of £10 million to the States as part of a capital expenditure programme of £30 million on increasing and improving patient accommodation. All States accepted the Commonwealth offer.

The following table sets out the amounts which have been paid to the State Governments by the Commonwealth Government each year from 1953-54 to 1957-58.

**EXPENDITURE ON MENTAL HOSPITALS BY THE COMMONWEALTH GOVERNMENT.**  
(£.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1953-54 ..	209,772	156,752	62,413	37,370	18,280	10,246	494,833
1954-55 ..	106,525	53,820	36,460	15,871	9,453	3,457	225,586
1955-56 ..	208,763	445,747	66,588	12,245	9,984	29,822	773,149
1956-57 ..	383,555	527,213	88,068	128,467	51,855	68,974	1,248,132
1957-58 ..	324,151	545,365	114,104	152,159	29,236	91,384	1,256,399

Amounts shown in the foregoing table in respect of the years 1953-54 and 1954-55 represent payments made under the Mental Institutions Benefits Act 1948. Amounts shown in respect of 1955-56 to 1957-58 represent payments made during the year shown under the States Grants (Mental Institutions) Act 1955. The total amounts payable to each State under the last-mentioned Act are as follows:—

	£
New South Wales .. .. .	3,830,000
Victoria .. .. .	2,740,000
Queensland .. .. .	1,460,000
South Australia .. .. .	895,000
Western Australia .. .. .	720,000
Tasmania .. .. .	355,000
<b>Australia .. .. .</b>	<b>10,000,000</b>

There are no mental hospitals in the Northern Territory or the Australian Capital Territory.

4. **Medical Benefits.**—A medical benefits scheme has operated since July, 1953, being authorized firstly by the National Health (Medical Benefits) Regulations and then by the National Health Act 1953.

The basic principle of the scheme is Commonwealth support of voluntary insurance towards meeting the costs of medical attention. The benefits payable by the Commonwealth are paid either on a fee-for-service basis in respect of the items set out in the first and second schedules to the National Health Act, or in the form of a subsidy not exceeding half of the payments made to doctors by registered organizations under contract arrangements.

In order to qualify for the Commonwealth benefit, a person is required to be insured with a registered medical benefits organization. The organization pays the Commonwealth benefit to the contributor, usually at the time it pays its own benefit. Reimbursement of the Commonwealth benefit is subsequently made to the organization by the Commonwealth.

Until 1st January, 1959, organizations' rules generally provided for disallowance of claims for fund benefit in cases of pre-existing ailments and long-term illnesses. As from 1st January, 1959, provision has been made for Fund benefit to be paid in these cases.

An organization wishing to be registered by the Commonwealth for the purposes of the medical benefits scheme is required to provide to its contributors, subject to its rules, all benefits specified in the first schedule, at rates not less than those provided by the Commonwealth. The organization must be non-profit-making. The Fund benefit payable is generally equal to the amount of Commonwealth benefit and is paid from Special Accounts guaranteed by the Commonwealth or from the Ordinary Accounts of the organizations.

In 1957-58, Commonwealth expenditure on medical benefits was £7,085,524.

The following table shows the number of registered medical benefit organizations, their membership, the number of medical services rendered to members and their dependants, and payments of Commonwealth benefits and medical fund benefits to members of

registered organizations. As many persons contribute on behalf of both themselves and their dependants, the total number of persons covered by medical benefit schemes is considerably higher than the number of contributors. Reliable figures for coverage are not available.

#### MEDICAL BENEFITS: SUMMARY, YEAR ENDED 30th JUNE, 1958.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia. (a)
Registered Organizations							
No.	25	22	6	9	9	10	81
Members	No. 1,087,939	594,003	259,041	212,054	184,934	84,109	2,422,080
Medical Services	No. 6,794,173	3,761,425	1,666,230	1,522,764	1,432,459	405,288	15,582,339
Commonwealth Benefit	£ 3,117,206	1,681,608	743,664	707,498	656,812	178,736	7,085,524
Fund Benefit	£ 4,042,663	1,641,711	917,683	781,214	854,629	238,534	8,476,434

(a) No medical benefit organization is registered in the Northern Territory or the Australian Capital Territory. Persons who live in one of those territories, or who are overseas, receive their Commonwealth Benefit and fund benefit through membership of an organization registered in one of the States.

**5. Pensioner Medical Service.**—The Pensioner Medical Service, which commenced on 21st February, 1951, was introduced under the authority of the National Health (Medical Services to Pensioners) Regulations made under the provisions of the National Health Service Act 1948–1949. The service has been continued under the provisions of the National Health Act 1953–1958.

The service provided to eligible pensioners consists of medicines provided free of cost and a medical service of a general practitioner nature such as that ordinarily rendered by a general medical practitioner in his surgery or at the patient's home. Specialist services are not provided. Patients may be charged a small fee by doctors for travelling and attendance outside normal surgery or visiting hours. Doctors participating in the scheme are paid on a fee-for-service basis by the Commonwealth Government.

Persons eligible to receive the benefits of the service are those who satisfy a means test and are receiving an age, invalid or widow's pension under the Social Services Act or a service pension under the Repatriation Act; persons receiving a tuberculosis allowance under the Tuberculosis Act; and dependants of persons eligible for the service.

Since 1st November, 1955, the means test which has applied to new enrolments in the service is the income test that had to be satisfied in order to qualify for a full rate pension as at 31st December, 1953.

The means test does not apply to persons who had applied for and were eligible to receive a pension prior to 1st November, 1955, or to persons receiving a tuberculosis allowance.

At 30th June, 1958, 5,243 doctors were enrolled in the scheme to attend to approximately 697,457 pensioners and their dependants.

During the year ended 30th June, 1958, doctors in the scheme performed 5,765,642 services—visits and surgery consultations—for persons enrolled in the scheme. For these services they were paid £3,198,791. The average number of services rendered by doctors to each person was 8.3.

**6. Anti-Tuberculosis Campaign.**—The main provisions of the Tuberculosis Act 1948 are as follows:—(a) Section 5 authorizes the Commonwealth to enter into an arrangement with the States for a national campaign against tuberculosis; (b) Section 6 empowers the Commonwealth to take over or provide specified facilities for the diagnosis, treatment and control of tuberculosis; (c) Section 8 provides for the setting up of an advisory council to advise the Commonwealth Minister for Health on matters relating to the national campaign; and (d) Section 9 authorizes the Commonwealth to pay allowances to sufferers from tuberculosis and their dependants.

Under an arrangement with the Commonwealth Government, each State is required to conduct a campaign against tuberculosis. The Commonwealth Government reimburses the State for all approved capital expenditure in relation to tuberculosis, and for net maintenance expenditure to the extent that it exceeds net maintenance expenditure for the year 1947–48. Thus the States are required to carry out the physical or field work of the national campaign and the Commonwealth acts in an advisory, co-ordinating and financial capacity. For this reason, the Commonwealth has not found it necessary to make much use of its powers under Section 6.

An advisory council, known as the National Tuberculosis Advisory Council, has been set up. There are twelve members, the chairman being the Commonwealth Director-General of Health. Other members are the Commonwealth Director of Tuberculosis, the six State Directors of Tuberculosis, the Consultant (Chest Diseases) of the Department of Repatriation, two specialist private practitioners, and the Chief Administrative Officer of the Commonwealth Department of Health.

To help reduce the spread of infection, the Commonwealth Government pays living allowances to persons suffering from tuberculosis, so that they may give up work and undergo treatment. These allowances have been in operation since 13th July, 1950. Since 24th October, 1957, the rates payable have been:

- Married sufferer with a dependent wife £10 7s. 6d. a week.
- Each dependent child under the age of sixteen years 10s. a week (additional to child endowment)
- Sufferer without dependants .. .. £6 10s. a week (reducible to £4 7s. 6d. a week if a person is maintained free of charge in an institution).

There is a means test on income but not on property. The allowance is reduced by the amount by which a person's income from sources other than his allowance exceeds, in the case of a married person, £7 a week, and in the case of a person without a dependent wife, £3 10s. a week.

The following table gives particulars of the number of new cases of tuberculosis notified in Australia for the year 1957-58.

**TUBERCULOSIS: NEW CASES NOTIFIED, YEAR ENDED 30TH JUNE, 1958.**

State or Territory.	Age Group.					Total.
	0-14.	15-34.	35-54.	55 and over.	Not Stated.	
New South Wales ..	62	348	623	585	6	1,624
Victoria .. ..	69	262	249	237	..	817
Queensland .. ..	72	190	295	281	14	852
South Australia ..	20	75	93	96	..	284
Western Australia ..	14	84	148	124	1	371
Tasmania .. ..	8	72	54	36	..	170
Northern Territory ..	11	22	30	14	2	79
Australian Capital Territory .. ..	..	5	3	5	..	13
<b>Australia .. ..</b>	<b>256</b>	<b>1,058</b>	<b>1,495</b>	<b>1,378</b>	<b>23</b>	<b>4,210</b>

The following table sets out expenditure by the Commonwealth Government during 1957-58 on its anti-tuberculosis campaign.

**ANTI-TUBERCULOSIS CAMPAIGN: EXPENDITURE BY THE COMMONWEALTH GOVERNMENT, 1957-58.**

(£.)

State or Territory.	Allowances.	Maintenance.	Capital.	Total.
New South Wales .. ..	447,349	1,740,107	593,219	2,780,675
Victoria .. ..	295,548	1,049,952	75,340	1,420,840
Queensland .. ..	226,952	771,547	678,402	1,676,901
South Australia .. ..	144,949	368,341	107,817	621,107
Western Australia .. ..	76,109	452,268	669,299	1,197,676
Tasmania .. ..	63,786	187,000	4,385	255,171
Northern Territory .. ..	..	..	..	..
Australian Capital Territory .. ..	..	..	..	..
<b>Australia .. ..</b>	<b>1,254,693</b>	<b>4,569,215</b>	<b>2,128,462</b>	<b>7,952,370</b>

The following table sets out expenditure by the Commonwealth Government on its anti-tuberculosis campaign since the start of the campaign.

**ANTI-TUBERCULOSIS CAMPAIGN: EXPENDITURE BY THE COMMONWEALTH GOVERNMENT 1947-48 TO 1957-58.**

(£.)

Year.	Allowances.	Maintenance.	Capital.	Total.
Total 1947-48 to 1952-53 ..	5,743,675	5,999,827	2,670,088	14,413,590
1953-54 .. .. .	1,876,581	3,703,067	1,379,482	6,959,130
1954-55 .. .. .	1,904,467	3,752,856	1,709,405	7,366,728
1955-56 .. .. .	1,689,774	4,006,869	1,757,612	7,454,255
1956-57 .. .. .	1,460,651	4,754,765	2,381,210	8,596,626
1957-58 .. .. .	1,254,693	4,569,215	2,128,462	7,952,370

7. **Anti-Poliomyelitis Campaign.**—The success of the 1954 United States field trials of the poliomyelitis vaccine developed by Dr. Jonas Salk and his associates at the University of Pittsburg was announced in April, 1955. The Commonwealth Government immediately decided to produce the anti-polio vaccine in Australia.

With the advantage of the experience of the campaigns in the United States and Canada, Australia has adopted a vaccine which has proved to be safe and effective in building up immunity against poliomyelitis.

The vaccine was being produced in Australia by the end of 1955 under the most rigid safety conditions. Plans were made for comprehensive testing procedures to be carried out at many stages both during the production process and with the finished product. These tests ensured the maintenance of safety standards no less rigid than those laid down in other countries where vaccination campaigns were in progress. The Research Laboratory at the Fairfield Hospital, Melbourne, agreed to act as an independent testing authority under an arrangement with the Commonwealth Government, and the pathology department of the University of Melbourne also agreed to conduct tests. No vaccine was released for use unless the searching requirements of the Commonwealth Serum Laboratories, the Fairfield Hospital, and the University of Melbourne were met.

The vaccine was supplied to the States free of charge and the States accepted responsibility for the cost of their particular vaccination programmes. No child can be vaccinated without the consent of his parents or guardian.

**Distribution of the Salk poliomyelitis vaccine to the States began in July, 1956.** The States are responsible for the organization and running of their own campaigns and for the distribution of the vaccine in accordance with priority groups established by the National Health and Medical Research Council. The first priority group consists of children in the 0-14 age group, expectant mothers, and persons subjected to special risk. These persons have been found to be the most vulnerable.

Vaccination against poliomyelitis takes the form of three injections of the vaccine. The second injection is given approximately four weeks after the first, and the third injection is given not less than 32 weeks after the first.

Where the incidence of the disease in certain areas approaches epidemic proportions, special efforts have been made to vaccinate all persons giving their consent in the area as soon as possible.

By the end of 1958, approximately 2,350,000 children had completed the course of injections and, in addition, approximately 360,000 children had commenced the course.

Campaigns for the mass immunization of adults were not commenced until early in 1958 because available supplies of vaccine up to that time were required for the immunization of children and groups subject to special risk. By the end of 1958, approximately one million adults had commenced or completed courses of injections.

## POLIOMYELITIS : NEW CASES NOTIFIED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1953 .. ..	630	284	207	398	44	112	1	1	1,677
1954 .. ..	555	569	134	176	436	10	..	26	1,906
1955 .. ..	222	235	190	182	33	7	4	1	874
1956 .. ..	240	251	112	122	401	55	..	13	1,194
1957 .. ..	58	13	24	16	8	6	..	..	125

8. Free Milk for School Children Scheme.—In 1950, the States Grants (Milk for School Children) Act was passed. The object of this Act was to improve the diet of school children by the addition of a small quantity of milk each day. All children under the age of thirteen years attending public or private primary schools, including nursery schools, kindergartens, crèches and aboriginal missions, are eligible to receive free milk. The cost of the milk plus half the capital or incidental costs, including administrative expenses of the scheme, is reimbursed by the Commonwealth to the States. All States now participate in the scheme. At 30th June, 1958, approximately 1,200,000 children were receiving free milk.

Expenditure by the Commonwealth Government under the scheme since its inception has been as follows:—

**COMMONWEALTH EXPENDITURE ON MILK FOR  
SCHOOL CHILDREN SCHEME.  
(£.)**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Australia.
1950-51 to 1952-53 ..	1,177,447	573,766	55,000	250,042	160,476	150,390	391	9,342	2,376,854
1953-54 ..	881,600	429,000	204,600	156,000	107,138	219,580	552	6,891	2,005,361
1954-55 ..	980,589	498,000	323,340	156,000	127,015	145,695	921	10,760	2,242,320
1955-56 ..	1,042,173	540,000	308,000	184,000	137,211	185,000	1,016	14,048	2,411,448
1956-57 ..	1,094,469	600,901	386,999	200,000	158,659	156,275	1,323	16,146	2,614,772
1957-58 ..	1,139,512	677,000	401,000	212,000	153,600	160,433	860	18,186	2,762,591

The figures in the foregoing table differ slightly from those in the table shown in Chapter XVIII., Welfare Services (p. 668), since they include capital and administrative costs. Figures in the latter table represent only expenditure which is a charge on the National Welfare Fund (i.e., the cost of the milk).

### § 3. Commonwealth Laboratories and Research Institutions.

1. National Health and Medical Research Council.—In 1926, the Commonwealth Government established a Federal Health Council, in accordance with a recommendation of the Royal Commission on Health (1925), "for the purpose of securing closer co-operation between the Commonwealth and State Health Authorities". This council held sessions each year except in 1932. In 1936, the Commonwealth Government decided to create a body with wider functions and representation, and the National Health and Medical Research Council was established with the following functions:—

- To advise Commonwealth and State Governments on all matters of public health legislation and administration, on matters concerning the health of the public and on medical research.
- To advise the Commonwealth Government on the expenditure of money specifically appropriated to be spent on the advice of this Council.
- To advise the Commonwealth Government on the expenditure of money on medical research and on projects of medical research generally.
- To advise Commonwealth and State Governments upon the merits of reputed cures or methods of treatment which are from time to time brought forward for recognition.

The council consists of the Commonwealth Director-General of Health (as chairman), two officers of his department, the official head of the Health Department in each State, together with representatives of the Federal Council of the British Medical Association, the Royal Australasian College of Surgeons, the Royal Australasian College of Physicians, the Australian Regional Council of the Royal College of Obstetricians and Gynaecologists,

the Australian Dental Association, the Council of the Australian College of General Practitioners, the College of Pathologists of Australia and (jointly) the five Australian universities having medical schools. A prominent layman and laywoman, appointed by the Commonwealth Government, also serve on the council.

The first session of the National Health and Medical Research Council was held at Hobart in February, 1937. The forty-sixth session was held at Sydney in November, 1958.

Under the Medical Research Endowment Act 1937, the Commonwealth Government has made an annual appropriation of funds to assist:—(a) departments of the Commonwealth or of a State engaged in medical research; (b) universities for the purpose of medical research; (c) institutions and persons engaged in medical research; and (d) in the training of persons in medical research.

Approved research institutions under this system now number 72. For 1959, grants for projects numbered 50 in the following fields:—bacteriology, biochemistry, biophysics, clinical research, dentistry, epidemiology, haematology, medical chemistry, neurology, neuro-physiology, obstetrics, pathology, physiology and pharmacology, tuberculosis and diseases due to viruses. In certain instances, equipment and apparatus have been made available by the council; this has greatly facilitated some specialized lines of research. The wide scope of work being carried out is greatly assisted by the formation of committees which meet regularly and advise the council on such subjects as industrial hygiene, public health, epidemiology, maternal and child welfare, radio-active isotopes, antibiotic distribution, nursing, tropical physiology and hygiene, tuberculosis, staphylococcus infections, dentistry and the latest developments in X-ray technology and application.

The research work being done under these grants is of a high standard, many of the individual investigators enjoying international reputations. Beyond this practical achievement, the original objectives of the council are being attained in encouraging young graduates to take up research work and in securing a continuity and permanence of medical research in Australia.

Four scholarships are available each year to allow study overseas for one year; in addition, assistance is often given to scholarship-holders to cover part of their travel expenses.

**2. Commonwealth Serum Laboratories.**—The Laboratories were established in 1916 under the administration of the Department of Trade and Customs and since 1921 have operated under the Department of Health. Buildings occupy a site of 23 acres at Royal Park, Melbourne, and a farm of 325 acres is situated at Broadmeadows nine miles from Melbourne.

Their basic function is to ensure the supply of essential biological products to the Commonwealth in line with its national health needs. This includes—

- (a) Production and supply of essential biological products not otherwise freely available in Australia either because of the absence of local manufacturers or because of difficulties associated with their importation and marketing in a satisfactory condition. (Many biological products deteriorate rapidly.)
- (b) Research and development directed towards the improvement of existing biological products and the introduction of new ones.
- (c) The provision of a consultant service to advise medical and veterinary practitioners on all aspects of the use of biological products.

Since their foundation, the Laboratories have greatly extended in size and scope. They now produce some 450 regular products and many special products for use in the diagnosis, prevention and treatment of human and animal diseases. Professional, technical and other staffs total over 900.

Products comprise a full range of human bacterial and virus vaccines, veterinary bacterial and virus vaccines, serum products such as blood fractions, a wide variety of antibacterial and antitoxic sera, antivenenes, penicillin, endocrines, including insulin, A.C.T.H., pituitary and thyroid extracts, allergy test materials and desensitizing preparations, culture media and diagnostic agents for clinical and laboratory work.

Continuous research is conducted into the relevant aspects of bacteriology and immunology, and related fields. As the growth of medical and scientific knowledge in Australia and overseas reveals new methods of diagnosis, prevention and treatment of diseases, this information is applied to the preparation of new biological products at the Laboratories, the most recent being the production of poliomyelitis (Salk) vaccine.

Facilities are maintained for investigation in relation to public health matters which it is inconvenient or impracticable to handle at the Commonwealth Health Laboratories or the School of Public Health and Tropical Medicine.

The Laboratories serve as a national centre for the maintenance in Australia of International Standards of the Permanent Commission on Biological Standards (World Health Organization). They act as a regional reference centre for W.H.O. in collating reports of the prevalence of certain infectious diseases and provide facilities for the identification of diseases.

Veterinary biological products produced at the Laboratories have given the lead to other producers in Australia, resulting in the diminution of incidence of a number of serious infectious stock diseases.

3. **The Commonwealth Health Laboratories.**—Health Laboratories, of which there are fourteen, are situated in the following towns: Albury, Bendigo, Cairns, Canberra, Darwin, Hobart, Kalgoorlie, Launceston, Lismore, Port Pirie, Rockhampton, Tamworth, Toowoomba and Townsville. They were established as an essential part of the quarantine system but were also to undertake research into local health problems and to provide doctors of each district with up-to-date facilities for laboratory investigation and diagnosis. It was realized that co-operation between the general practitioner with his clinical observations and knowledge of the environment of disease on the one hand, and the staff of a well-equipped laboratory on the other, is essential to the investigation and control of disease.

From this standpoint, the Laboratories have already proved their value in the determination of leptospirosis and endemic typhus in North Queensland, in the investigation of special local problems in Darwin, of undulant fever throughout Australia, of silicosis and tuberculosis at Kalgoorlie and of plumbism at Port Pirie. In these investigations, close co-operation has existed with State and local health and hospital services; especially is this so in Queensland where collaboration has yielded exceptionally valuable results in differentiating the groups of fevers previously unclassified in that State. In this investigational work, as well as in more routine activities, the Laboratories have at their disposal the full resources and technical and specialist facilities available at the Commonwealth Serum Laboratories and the School of Public Health and Tropical Medicine, Sydney.

4. **Commonwealth Acoustic Laboratories.**—During the years 1942-46, the Acoustic Research Laboratory at Sydney, which was sponsored by the National Health and Medical Research Council, investigated problems of noise and difficulties of intercommunication in aircraft and tanks. In subsequent years, it directed its attention to the problem of deafness in children, particularly the group whose affliction was caused by the mother contracting rubella in the early months of pregnancy. In January, 1947, the Department of Health took over the laboratory. Subsequently, it established branch laboratories in all other State capital cities.

The Acoustic Laboratories Act 1948 allowed the Laboratories to:—(1) provide hearing-aids for the Repatriation Commission and the Department of Social Services; (2) assist the Education Departments of the States in measuring deafness, by providing and maintaining portable audiometric equipment; (3) make independent tests on behalf of various State and other authorities; (4) investigate problems associated with noise in industry; (5) make hearing tests of Civil Aviation aircrew as required by international agreement; (6) give advice to the armed services on noise problems; and (7) provide hearing aids for school-children and members of the defence forces as required.

The Laboratory in Sydney is responsible for the training of personnel for the whole Acoustic Service, the production of equipment, the calibration of hearing-aids and audiometers and the technical administration of the branch laboratories.

5. **Commonwealth X-ray and Radium Laboratory.**—The Commonwealth Radium Laboratory was established in 1929 by the Commonwealth Department of Health to act as the custodian of radium and to ensure its equitable distribution and satisfactory use.

A total of 10 grams of radium, purchased in 1928 by the Commonwealth Government for use in treatment and research, has been distributed on loan to treatment centres throughout Australia. Under the terms of this loan, treatment at well-equipped clinics is available to all persons requiring it, irrespective of their ability to pay. This work is co-ordinated by the Department. From time to time, portions of the original radium holding have been remounted by the Department in forms more suitable for recently developed techniques.

In 1935, the Commonwealth Department of Health extended the work of the Commonwealth Radium Laboratory to include the investigation of the physical problems of radiation therapy generally. This laboratory, now known as the Commonwealth X-ray and Radium Laboratory, is maintained, controlled, and staffed by the Commonwealth Department of

Health. It is specifically designed for work with X-rays and radium, and is amply provided with all necessary equipment for research work, including a 400,000 volt high-tension generator. The free-air chamber which acts as the Australian standard X-ray dosimeter is maintained in the Laboratory.

The Laboratory co-operates closely with the local physical services which have been developed in the other capital cities of Australia to provide local facilities for the production of radon, for the calibration of X-ray therapy equipment, and for the measurement of radiation exposure of X-ray and radium workers. It also undertakes investigations into physical problems arising in the use of X-rays and radium in treatment. In recent years, the Laboratory has widened its functions to include investigations of the physical aspects of the diagnostic use of X-rays with particular emphasis on miniature radiography.

During the year 1957-58, a total of 77,572 millicuries of radon was prepared and issued from the Laboratory in the form of implants, needles and tubes for use in Victoria, Tasmania, South Australia and Western Australia. A further 23,994 millicuries were issued by the associated centres in Sydney and Brisbane. The corresponding figures for 1956-57 were 88,393 and 27,209 millicuries respectively. The issue of radon from a few centres to serve hospitals all over the continent is an Australian development and enables very efficient use to be made of the radium available.

Supplies of artificial radio-isotopes have been made available through the development of atomic energy programmes overseas. The radio-isotopes can be used medically either as an alternative to natural radio-active materials such as radium and radon, or they may be administered orally or intravenously to patients, in which case the selective up-take by a particular organ or tissue may be used to determine its condition. In addition, radio-isotopes are used in industry, in production control, the investigation of the efficiency of processes and as research tools.

The importation of artificial radio-isotopes is restricted under Customs (Prohibited Imports) Regulations, approval for importation being given through the Laboratory by the Director-General of Health after it has been established that the isotope will be used safely and usefully. Isotopes used in Australia are obtained from Great Britain, Canada and the United States of America, and are imported through the Laboratory.

During 1957-58, 34 different radio-isotopes were imported for all purposes. This represented 657 separate deliveries from overseas sources of supply.

Regular bulk supplies of radio-isotopes for medical purposes are obtained and these are distributed by the Laboratory as individual doses for use on patients throughout Australia according to a policy developed by the Committee on Radio-isotopes of the National Health and Medical Research Council. These radio-isotopes are issued free of charge.

Eight different radio-isotopes were imported in the year 1957-58 for medical purposes, radio-iodine, radio-phosphorus and radio-gold being in greatest demand. However, during 1957-58, an increasing use was made of radio-chromium and radio-iron as labelled compounds in haematological investigations and of radio-cobalt labelled vitamin B12 and radio-iodinated human serum albumin.

In all, approximately 6,100 individual doses of radio-isotopes were issued by the Laboratory during 1957-58 for use on patients.

The use of radio-isotopes in research and industry is also steadily increasing.

Investigations of the degree of protection necessary in particular applications of X-rays and radio-active materials continue to be an important activity of the Laboratory. It prepares specifications of the protection facilities necessary in departments and laboratories employing ionizing radiation in medicine, research and industry and carries out measurements of radiation levels in existing departments and laboratories. An extensive film badge service to measure the radiation dose received by those exposed to ionizing radiation is maintained. In 1957-58, 16,010 film badges were processed and assessed. The corresponding figure for 1956-57 was 12,548 films.

The Laboratory has an extensive library of special radiological literature and issues regular library bulletins. Through its advisory service, the Laboratory is available for consultation to all users of ionizing radiation. Technical communications on topics related to its functions are issued from time to time to medical men engaged in the clinical investigation and treatment of cancer and to research workers and those in industry interested in applications of radiation.

Officers of the Laboratory serve on a number of committees, both national and international.

**6. The School of Public Health and Tropical Medicine.**—In March, 1930, the Commonwealth Government, under an agreement with the University of Sydney, established a School of Public Health and Tropical Medicine at the University of Sydney for the purpose of training medical graduates and students in the subjects of public health and tropical medicine. The organization of the Australian Institute of Tropical Medicine at Townsville was merged in the new school, and the staff, equipment and material were transferred to Sydney.

The School comprises sections of Preventive Medicine, Tropical Medicine, Occupational Health, Environmental Health, Biochemistry, Bacteriology and Pathology, Parasitology, Medical Entomology and Medical Statistics. The Child Welfare section of the Institute of Child Health is located at the School, with which it is closely associated. The library, which includes approximately 17,000 bound volumes and a large collection of official and institutional papers and reports, forms an important information centre in the subjects of public health and tropical medicine.

The work of the school comprises both teaching and investigation. Courses are held for the university post-graduate diploma in public health and the diploma in tropical medicine and hygiene. Lectures are given in public health and preventive medicine as prescribed for the fifth year of the medical curriculum. Courses are also provided in hygiene for students of architecture and social studies, and in tropical medicine for lay officers and nurses in tropical service, and missionaries. Training is also provided for certain personnel of the armed services, for sister tutors and for laboratory workers from various services and institutions.

Investigation covers a wide field of public health and medical subjects, both in the laboratory and in the field. Field work has been carried out in Australia and in Papua, New Guinea, Norfolk Island and Nauru in co-operation with the local administrations and the South Pacific Commission.

**7. Commonwealth Bureau of Dental Standards.**—This laboratory is concerned with research, standards and testing related to dental and allied materials and processes. It became part of the Department of Health in January, 1947, but for the preceding eight years it was sponsored by the National Health and Medical Research Council. During that time, the former Dental Materials Research Laboratory established itself as a recognised authority in its special field and proved to be of particular value to the defence services, government departments, the dental profession and manufacturers of dental products. By maintaining the quality of dental materials and improving techniques for their use, the Bureau continues to assist the dentist in his service to the community—a service that calls for restorations and appliances of a high degree of precision and permanence under very exacting conditions.

The functions of the Bureau are: (1) original research into dental equipment, materials, techniques and processes; (2) regular reporting of the results of these investigations in recognized Australian scientific journals; (3) the development through the Standards Association of Australia, in consultation with a committee representing the Commonwealth Department of Health, the Australian Dental Association and manufacturers and distributors, of specifications for dental materials and equipment; and (4) the provision of a consultative service and testing facilities for manufacturers and distributors of dental materials with a view to assisting them in the improvement of existing products and the development of new materials.

**8. The Australian Institute of Anatomy.**—The Australian Institute of Anatomy is situated in a building erected in Canberra by the Commonwealth Government under the Zoological Museum Agreement Act of 1924. Prior to the passing of this Act, the Commonwealth Government had expressed regret that the Australian nation possessed neither a collection of specimens of the unique and fast disappearing fauna of Australia, nor a museum in which such specimens could be preserved for future generations. Sir Colin MacKenzie, the first Director of the Institute of Anatomy, presented his entire private collection of Australian fauna to the Commonwealth Government. This gift was housed in the Australian Institute of Anatomy. The Institute became part of the Commonwealth Department of Health in 1931.

The original collection has been greatly augmented. A list of gifts to the Australian nation may be found in Official Year Book No. 39, page 1277. In addition to these donations of material, there have been several endowments for orations and lectures, particulars of which are shown in previous issues of the Official Year Book.

The Institute consists of a museum section and a laboratory section. In the museum section, which is open to the public, a portion of the original collection of anatomical specimens assembled by Sir Colin MacKenzie, is displayed together with ethnological collections which have been added since the foundation of the Institute. The material has been arranged to present simple lessons in human hygiene, to display the anatomical features and peculiarities of Australian fauna, and to display aspects of the character of Australian aboriginals and natives of Papua and New Guinea.

A number of Health Department sections are now situated in the Institute. These include the Museum and Medical Artistry Section, the Nutrition Section, the Commonwealth Health Laboratory for the Australian Capital Territory, a Veterinary Laboratory, and the Laboratory Section of the Division of Plant Quarantine.

The scientific research work of the Institute is now concentrated on problems of nutrition. It takes the form of field surveys of the dietary status of the Australian population and laboratory investigations into the biochemistry of nutrition and metabolism. For further information concerning the Institute see Official Year Book No. 32, pages 919–21.

#### § 4. Control of Infectious and Contagious Diseases.

1. **General.**—The provisions of the various Acts with regard to the compulsory notification of infectious diseases and the precautions to be taken against the spread thereof may be conveniently dealt with under the heading of quarantine and notifiable diseases, including venereal diseases.

2. **Quarantine.**—The Quarantine Act is administered by the Commonwealth Department of Health, and has three sections of disease control, as follows:—(i) Human quarantine, which controls the movements of persons arriving from overseas until it is apparent that they are free of quarantinable disease; (ii) Animal quarantine, which controls the importation of animals and animal products from overseas and the security of other animals present on vessels in Australian ports; and (iii) Plant quarantine, which regulates the conditions of importation of all plants and plant products with the object of excluding plant diseases, insect pests and weeds.

In respect of interstate movements of animals and plants, the Act becomes operative only if the Governor-General considers that Commonwealth action is necessary for the protection of any State or States; in general, the administration of interstate movements of animals and plants is left in the hands of the States.

(i) *Human Quarantine.* All passengers and crews arriving in Australia from overseas, whether by air or sea, are subjected to a medical inspection by quarantine officers for the purpose of preventing the introduction of disease into Australia. At the major ports, full-time quarantine officers carry out the work but in the minor ports local doctors act as part-time quarantine officers. In each State, quarantine activities are controlled by a medical officer of the Commonwealth Department of Health with the title of Commonwealth Director of Health.

The main concern of the examining officers is to detect cases of the quarantinable diseases smallpox, cholera, yellow fever, plague and typhus fever. These diseases are not endemic to Australia and it is of great importance to prevent their entry. Quarantine stations at the major ports and at Darwin, Thursday Island and Townsville are kept ready for occupation at all times. In addition, persons arriving in Australia and suffering from infectious diseases such as chicken pox, mumps, scarlet fever and measles are directed to appropriate care and placed in isolation where necessary.

The increasing use of air travel has created particular quarantine problems. Before the use of air transport, persons suffering from an infectious disease would show symptoms on arrival and before disembarkation. Passengers travelling by air, however, can arrive well within the incubation period, and they are, therefore, required to be vaccinated against smallpox before departure. Those from an area infected with cholera or yellow fever are required to be inoculated in addition against the particular disease prevalent in that area. They are also required to report any sickness which they might suffer within the fourteen days after arrival. All passengers, whether they arrive by sea or air, are required to give their intended place of residence so that they may be traced if a case of disease occurs among the passengers on the aircraft or ship by which they travelled to Australia.

The number of cases of infectious (non-quarantinable) diseases which were discovered among the passengers and crew of oversea vessels and aircraft calling at Australian ports during the year ended 30th June, 1958, and during the preceding four years, are shown in the following tables.

**HUMAN QUARANTINE: CASES OF INFECTIOUS (NON-QUARANTINABLE) DISEASES ON OVERSEA VESSELS AND AIRCRAFT CALLING AT AUSTRALIAN PORTS, YEAR ENDED 30th JUNE, 1958.**

Disease.	Number of Oversea Vessels and Aircraft on which Cases were Found.	Number of Cases of Infectious Disease.	
		Passengers.	Crew.
Chicken Pox .. .. .	21	45	3
Diphtheria .. .. .	1	..	1
Infective Hepatitis .. .. .	1	..	1
Influenza .. .. .	6	13	8
Lymphogranuloma Venereum .. .. .	1	..	2
Measles .. .. .	17	58	3
Mumps .. .. .	16	17	2
Rubella .. .. .	4	28	..
Varicella .. .. .	3	38	..
Whooping Cough .. .. .	2	3	..
<b>Total .. .. .</b>	<b>(a) 61</b>	<b>202</b>	<b>20</b>

(a) On some vessels there may be cases of more than one disease.

**HUMAN QUARANTINE: OVERSEA VESSELS AND AIRCRAFT ARRIVING IN AUSTRALIA AND CASES OF INFECTIOUS (NON-QUARANTINABLE) DISEASE FOUND THEREON.**

Year ended 30th June.	Number of Oversea Vessels and Aircraft Cleared.		Number of Oversea Vessels and Aircraft on which Cases were Found.	Number of Cases of Infectious Disease.	
	Ships.	Aircraft.		Passengers.	Crew.
1954 .. .. .	2,254	1,221	44	319	5
1955 .. .. .	2,319	1,310	48	267	3
1956 .. .. .	2,592	1,417	26	104	4
1957 .. .. .	2,702	1,747	53	216	10
1958 .. .. .	2,658	1,881	61	202	20

(ii) *Animal Quarantine.* Animal quarantine, authorized by the provisions of the Quarantine Act 1908-1950, aims at preventing the introduction or spread of animal diseases. It covers the importation of all animals, raw animal products and biological cultures associated with animal diseases and goods associated with animals.

Domesticated animals, i.e., horses, cattle, pigs, sheep, goats, dogs, cats and poultry, are admitted from a limited number of countries depending on diseases present in the country of origin. All must be accompanied by health certificates which include prescribed tests. On arrival in Australia, they are subject to quarantine detention.

Zoological specimens are imported into registered zoos where they remain in permanent quarantine. Circuses are also registered if exotic species of animals are kept. In a somewhat similar manner, animals for scientific purposes are imported to approved laboratories. All these premises are kept under constant surveillance. Raw animal products such as

hair, special types of wool, skins and hides, are specially treated under quarantine control, whilst such items as raw meat, sausage casings and eggs, which cannot be sterilized, are admitted from very few countries. Other items such as harness fittings, fodder, and ship's refuse, are treated to destroy any possible infection.

The Division of Veterinary Hygiene was created in 1926 to deal with the administration of animal quarantine. Formerly the full responsibility for this administration fell on the Director of Quarantine. The organization of the Division provides an excellent example of Commonwealth and State co-operation. The central administration is situated within the Health Department at Canberra, with a Director, an Assistant Director and Veterinary Officers. The Principal Veterinary Officer of the Department of Agriculture in each State is appointed Chief Quarantine Officer (Animals) of the State, and members of his staff Quarantine Officers (Animals). These State officers carry out the quarantine policy formulated by the central administration. Quarantine accommodation is provided in permanent animal quarantine stations at each capital city.

The Division participates in world-wide international notification of the more serious contagious diseases of animals and maintains a census of such diseases throughout the world. Information regarding animal diseases and parasites in Australia is also collected and disseminated by means of service publications. Consultation on technical matters is maintained with various scientific institutions, notably the Commonwealth Scientific and Industrial Research Organization. In matters of policy and the quarantine control of imports, there is a close liaison with the Department of Customs and Excise.

The Division collaborates with the "General" and "Plant" divisions of the quarantine service. Many diseases of animals are communicable to man and for this reason "Animal" and "General" quarantine administration are in some respects inseparable. Similarly the interests of "Animal" and "Plant" divisions overlap, many items such as insects, fodder and straw being the subject of combined control.

In each alternate year, the Director of the Division convenes the Biennial Conference of Principal Commonwealth and State Veterinarians which meets under the auspices of the Australian Agricultural Council to discuss problems of animal health and disease control and animal quarantine.

In the Australian Capital Territory, veterinary officers of the division exercise control over animal disease, dairy and piggery hygiene, manage the Canberra abattoir and give advice to stockowners.

(iii) *Plant Quarantine.* Since 1st July, 1909, the importation into Australia of all plants or parts of plants, cuttings, seeds and fruits, whether living or dead, has been subject to an increasingly stringent quarantine with the object of preventing the introduction of insect pests, plant diseases and weeds not yet established in this country. Under the Quarantine Act 1908-1950, quarantine inspectors are required to examine all plant material at the first port of entry and to release only material free from diseases and pests. Everyone entering Australia is required to declare if he or she has any plant material in luggage or personal effects. Heavy penalties are laid down for those found evading the regulations. All plant material entering as cargo must also be declared.

When the Commonwealth became responsible for all plant quarantine, the State Governments agreed to co-operate by providing and maintaining inspection facilities and personnel, for which they are reimbursed by the Commonwealth. In 1921, the administration of the regulations came under the newly-formed Department of Health, and in 1927 the Division of Plant Quarantine was created, under a Director who is responsible for policy and legislation and for co-ordinating the work of the State officers, who carry out the detailed administration in their capacity as Commonwealth officers.

Any plant material found carrying diseases or pests, or suspected of doing so, may be ordered into quarantine for remedial treatment, or if the treatment be impracticable may be destroyed. The cost of treatment is met by the importer. Regulations governing the different types of plants are based on the following broad principles:—(a) The importation of plants likely to be infected with plant diseases, noxious fungi or poison plants is prohibited; (b) Agricultural seed must conform to standards of purity, insect pest and disease freedom; (c) Many commodities such as hops, cotton, peanuts in shell, nursery stock, potatoes, certain crop seeds, vines and specified plants may be imported only by approved importers under

special conditions; (d) Certain plant products such as bulbs and timber (in logs or sawn) from specified areas may be imported only if accompanied by certificates showing that prescribed treatment has been given in the country of origin.

3. Notifiable Diseases.—(i) *General.* (a) *Methods of Prevention and Control.* Provision exists in the Health Acts of all the States for the observance of precautions against the spread of, and the compulsory notification of, infectious disease. When any such disease occurs, the local authority must be notified at once, and in some States notification must be made also to the Health Department.

As a rule, the local authorities are required to report from time to time to the Central Board of Health in each State on the health, cleanliness and general sanitary state of their several districts, and on the appearance of certain diseases. Regulations are prescribed for the disinfecting and cleansing of premises, and for the disinfection or destruction of bedding, clothing or other articles which have been exposed to infection. Bacteriological examinations for the detection of plague, diphtheria, tuberculosis, typhoid and other infectious diseases within the meaning of the Health Acts are continually being carried out. Regulations are provided in most of the States for the treatment and custody of persons suffering from certain dangerous infectious diseases, such as smallpox and leprosy.

(b) *Diseases Notifiable and Cases Notified in each State and Territory.* The following table, which has been compiled by the Commonwealth Department of Health, shows for each State and Territory the diseases notifiable in 1957 and the number of cases notified. Diseases not notifiable in a State or Territory are indicated by an asterisk.

**DISEASES NOTIFIABLE IN EACH STATE AND TERRITORY OF AUSTRALIA AND NUMBER OF CASES REPORTED DURING THE YEAR ENDED 31st DECEMBER, 1957.**

Disease.	N.S.W.	Vic.	Q'ld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Acute rheumatism .. .. .	99	131	183	29	27	*	5	..	474
Amoebiasis .. .. .	*	4	2	1	10	2	1	..	20
Ankylostomiasis .. .. .	71	1	212	..	..	..	..	..	284
Anthrax .. .. .	..	..	..	..	..	..	..	..	..
Bilharziasis .. .. .	*	..	..	..	..	..	..	..	..
Breast Abscess .. .. .	*	*	(a) 57	*	*	*	*	1	58
Brucellosis .. .. .	16	28	2	2	2	1	..	..	51
Chorea .. .. .	4	12	1	..	1	*	..	..	18
Dengue .. .. .	..	..	*	..	..	..	..	..	..
Diarrhoea, infantile .. .. .	203	560	106	..	23	..	116	19	1,027
Diphtheria .. .. .	56	73	16	4	63	25	..	..	237
Dysentery, bacillary .. .. .	*	63	100	50	46	..	37	..	296
Encephalitis .. .. .	21	65	2	6	2	..	..	..	96
Erythema Nodosum .. .. .	..	19	..	4	1	..	..	..	24
Filariasis .. .. .	*	..	..	..	..	..	..	..	..
Homologous serum jaundice .. .. .	..	..	..	..	..	..	..	..	..
Hydatid .. .. .	..	14	*	2	..	12	..	1	29
Infective hepatitis .. .. .	2,405	1,386	71	258	363	128	46	18	4,675
Influenza .. .. .	..	*	..	b1,199	*	*	*	*	1,199
Lead poisoning .. .. .	*	..	5	3	1	*	..	..	9
Leprosy .. .. .	..	1	2	1	33	1	55	..	93
Leptospirosis .. .. .	10	..	197	..	1	*	..	..	208
Malaria .. .. .	..	9	31	..	2	3	53	1	99
Meningococcal infection .. .. .	94	104	47	5	6	25	..	4	285
Ophthalmia .. .. .	..	*	*	4	9	..	28	..	41
Ornithosis .. .. .	..	3	*	1	..	*	..	..	4
Paratyphoid fever .. .. .	6	1	..	1	3	4	..	2	17
Poliomyelitis .. .. .	58	13	24	16	8	6	..	..	125
Puerperal fever .. .. .	23	8	30	5	2	1	4	..	73
Rubella .. .. .	*	2,227	241	1,284	550	..	12	18	4,332
Salmonella infection .. .. .	..	*	..	19	21	..	1	..	41
Scarlet fever .. .. .	485	748	203	268	120	21	6	3	1,854
Tetanus .. .. .	..	14	30	15	4	1	3	1	68
Trachoma .. .. .	*	..	..	..	656	*	405	..	1,061
Trichinosis .. .. .	..	..	..	..	..	..	..	..	..
Tuberculosis .. .. .	1,609	758	762	265	352	174	105	10	4,035
Typhoid fever .. .. .	6	7	6	2	9	4	..	..	34
Typhus—flea, mite or tick borne .. .. .	2	..	52	..	7	..	1	..	62

\*Not notifiable.

(a) Notifiable from September, 1957.

(b) Notifiable from August, 1957.

NOTE.—No cases of cholera, plague, smallpox, epidemic typhus or yellow fever were notified.

(ii) *Veneral Diseases.* The prevention and control of venereal diseases are undertaken by the States. Each State has a Venereal Diseases Act, or provisions in the Health Act govern the control of these diseases. Under these Acts, treatment has been made compulsory in every State. Consequent steps have been taken to ensure free treatment by medical practitioners or in subsidized hospitals and clinics. Registered pharmaceutical chemists are allowed to dispense prescriptions for venereal diseases only if they are signed by medical practitioners. Clinics have been established and, in some cases, beds in public hospitals have been set aside for patients suffering from these diseases.

Penalties may be imposed on a patient who fails to continue under treatment. Clauses are inserted in the Acts which aim at preventing the marriage of any infected person and the employment of an infected person in the manufacture or distribution of foodstuffs.

### § 5. Commonwealth Grants to Organizations Associated with Public Health.

1. *General.*—In addition to providing the services mentioned in sections 1-4 above, the Commonwealth Government gives financial assistance to certain organizations associated with public health. Examples of organizations included in this category are the National Fitness Organizations, the Royal Flying Doctor Service of Australia, the Red Cross Blood Transfusion Service, and the Lady Gowrie Child Centres.

2. *National Fitness.*—In 1938, arising from a recommendation of the National Health and Medical Research Council, the Commonwealth Government appointed a Commonwealth Council for National Fitness, under the Commonwealth Minister for Health, to effect collaboration of Commonwealth, State and Local Government authorities in the National Fitness Movement. Following the recommendations of the first Commonwealth Council meeting in 1939, the Commonwealth Government agreed to make available an annual sum of £20,000 for five years and grants were allocated to each State for purposes of organization and to each of the six Australian universities to establish lectureships in physical education. In June, 1942, this grant was increased to £72,500 to include grants to State Education Departments and for the work in the Australian Capital Territory.

The functions of autonomous National Fitness Councils operating in each State are connected with voluntary leader training, camping and hostels, assisting the work of voluntary youth and amateur sports organizations, and providing advisory services to these organizations.

In four States, school camps are held as part of the regular school physical education programmes. In Western Australia, a combined European and aboriginal children's camp has become a regular annual feature. Education Departments spend their grant on physical education in schools and teachers' colleges. In New South Wales, Holiday Play Centres have become a feature of the programme while Queensland has concentrated on the provision of school swimming pools in co-operation with parent organizations.

In the universities, departments of physical education provide either a diploma course in physical education or a major course in physical education as part of a degree course.

An annual grant is made to sports and youth organizations in the Australian Capital Territory for the purchase of equipment, the development of coaching schemes, and the extension of club and camp facilities. In 1956, approval was given for the allocation, on a £1 for £1 basis, of £10,000 to the Y.M.C.A. for the erection of a central indoor recreation centre which will be for the use of youth and sports organizations in the Australian Capital Territory. Four Church organizations have also been assisted financially in the development of their youth centres.

3. **Royal Flying Doctor Service of Australia.**—The purpose of the Royal Flying Doctor Service of Australia is to provide medical and dental services to white and aboriginal persons in isolated areas. Most remote homesteads are equipped with two-way radio sets which they use for receiving ordinary radio programmes, participating in the School of the Air, and for contacting each other. In cases of minor illness or injury, they also use these sets to seek medical advice. If the illness or injury is serious, a doctor flies to the homestead and, if necessary, flies the patient to the nearest hospital. Standard medicine chests are supplied by the service. Each chest contains a first-aid book and instructions on the use of the various drugs and medical supplies in it. Further instructions are given by doctors over the air.

From time to time, special purpose work is undertaken in connexion with flood relief, searching for lost parties and co-ordinating cattle movements.

The service is not conducted with a view to profit. In some sections, small charges are made for particular services or a fixed annual charge is levied on graziers. Other sections rely on voluntary contributions from those who use their services. Donations and government contributions help to provide much of the overhead and capital expenditure incurred each year.

The Commonwealth has made an annual grant to this organization for operational expenses since 1936. Prior to that, from 1928 to 1931, the Commonwealth subsidized the Australian Inland Mission Aerial Medical Service. The Commonwealth annual grant to the Royal Flying Doctor Service of Australia towards maintenance was increased from £25,000 to £40,000 per annum for four years from 1st July, 1958. The Commonwealth grant towards capital expenditure was increased from £15,000 to £27,500 per annum for the same period. This capital expenditure grant is made on a £1 for £1 basis, in respect of approved projects.

The Royal Flying Doctor Service of Australia is conducted by a federal council comprising representatives of six sections, namely Queensland, New South Wales, Victoria, South Australia, Western Australia and the Eastern Goldfields of Western Australia. The Queensland, New South Wales and South Australian sections are centred in their own States but in Western Australia there are three centres, that in the far north being under the control of the Victorian section, and that in the south-east under the control of the Eastern Goldfields section. The third one, which has bases at Port Hedland and Meekatharra, is sponsored by the Western Australian section.

4. **Red Cross Blood Transfusion Service.**—The Australian Red Cross Society conducts a blood transfusion service in all States.

Before 1952–53, the cost of the Red Cross Blood Transfusion Service was borne by the Red Cross Society with assistance from the State Governments. In 1952, the Commonwealth made an amount of £50,000 available to the Red Cross Society through the State Governments. The States were to continue to assist the society at the same level as previously and make arrangements with the society to share any deficit still remaining.

The Commonwealth recognized that the proper maintenance of a blood transfusion service was of the utmost importance to the welfare of the community and that the service was one eminently suited for operation by the Australian Red Cross Society. In March, 1954, therefore, the Commonwealth offered each State Government a grant equal to 30 per cent. of the certifiable operating expenses incurred by the Society in the conduct of the blood transfusion service in that State. The grant was to be made subject to the conditions that the government of the State concerned agreed to meet 60 per cent. of the cost of operating

the service in that State, leaving the society to meet the remaining 10 per cent. of the cost. All States accepted this proposal. The following table sets out the payments made by the Commonwealth government to the State governments in 1957-58:—

**RED CROSS BLOOD TRANSFUSION SERVICE: PAYMENTS TO STATES FOR 1957-58.**

						£
New South Wales	..	..	..	..	..	34,677
Victoria	..	..	..	..	..	37,655
Queensland	..	..	..	..	..	22,069
South Australia	..	..	..	..	..	12,785
Western Australia	..	..	..	..	..	13,106
Tasmania	..	..	..	..	..	4,971
<b>Total</b>	..	..	..	..	..	<u>125,263</u>

5. **Lady Gowrie Child Centres.**—In 1940, the Commonwealth Government established a pre-school demonstration centre in each of the six capital cities. These centres are known as the Lady Gowrie Child Centres and are administered by the Australian Pre-school Association for the Commonwealth Department of Health.

The specialized function of the centres is that of demonstration and research and the programmes are carried out under the supervision of the Federal Pre-school Officer. Each centre is concerned with a study of the factors promoting and retarding physical and mental health in young children, and in demonstrating an educational health programme based on the developing needs of children aged 3 to 6 years.

The centres are used for observation by university students of Medicine, Psychology, Education, Social Studies, Architecture, Physical Education, Teacher Training Colleges, Nursing Colleges and Domestic Science.

Fuller information concerning these centres was given in earlier issues of the Year Book (*see* No. 44, p. 536).

## C. INSTITUTIONS.

### § 1. General.

In Australia, institutions related to public health may be classified to three groups: (a) State, (b) public and (c) private. To the first group belong those institutions wholly provided for by the State, such as the principal mental hospitals in the various States and the Government and leased hospitals in Western Australia. To the second group belong public institutions of two kinds, namely:—(i) those partially subsidized by the State or by State endowments for maintenance, but receiving also private aid, and (ii) those wholly dependent upon private aid. To the first of these two kinds belong such institutions as the principal metropolitan hospitals; in the second are included institutions established and endowed by individuals for the benefit of the needy generally. All institutions of a private character are included in the third group. A more or less accurate statistical account is possible in classes (a) and (b), but in respect of (c) general tabulation is impossible. Owing to differences in the dates of collection and tabulation, it is impossible to bring statistics of some charitable institutions to a common year.

### § 2. Public Hospitals (other than Mental Hospitals).

1. **General.**—All the State capitals have several large and well-equipped hospitals, and there is at least one in every important town. In large centres, there are special hospitals for infectious diseases, tubercular patients, women, children, and patients suffering from chronic diseases.

The particulars given herein refer to public hospitals at the latest available date and include all institutions affording hospital relief, whether general or special, with the exception of mental hospitals, repatriation hospitals, and private hospitals conducted commercially.

2. Number, Staff and Accommodation.—Details regarding the number of hospitals, staff, and accommodation for the year 1956-57 are given in the following table:—

## PUBLIC HOSPITALS: NUMBER, STAFF AND ACCOMMODATION, 1956-57.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Number of Hospitals	268	132	139	65	94	28	4	1	731
Medical Staff—									
Honorary ..	3,807	1,327	184	452	297	107	..	34	6,208
Salaried ..	684	696	614	138	107	110	13	3	2,365
Total ..	4,491	2,023	798	590	404	217	13	37	8,573
Nursing Staff ..	11,734	8,312	4,776	2,126	2,553	1,198	102	205	31,006
Accommodation—									
Number of beds and cots ..	20,993	12,274	11,502	3,825	4,232	2,357	368	250	55,801

The figures for accommodation shown in the table above include particulars, where available, of a considerable number of beds and cots for certain classes of cases in outdoor or verandah sleeping places.

3. In-Patients Treated.—The following table furnishes particulars of in-patients treated. The figures shown refer to cases, that is to say, a person who is admitted to hospital twice during a year is counted twice. Newborn babies are excluded unless they remain in hospital after their mothers' discharge.

## PUBLIC HOSPITALS: IN-PATIENTS TREATED, 1956-57.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
In-patients at beginning of year—									
Males ..	5,974	3,441	3,548	1,159	1,256	799	113	75	16,365
Females ..	8,293	4,731	3,543	1,453	1,314	841	104	81	20,360
Persons ..	14,267	8,172	7,091	2,612	2,570	1,640	217	156	36,725
Admissions and re-admissions during year—									
Males ..	158,686	83,563	89,937	30,385	36,207	12,014	3,344	2,130	416,266
Females ..	251,665	142,985	110,207	40,252	42,052	18,843	3,452	2,598	612,054
Persons ..	410,351	226,548	200,144	70,637	78,259	30,857	6,796	4,728	1,028,320
Total in-patients (cases) treated—									
Males ..	164,660	87,004	93,485	31,544	37,463	12,813	3,457	2,205	432,631
Females ..	259,958	147,716	113,750	41,705	43,366	19,684	3,556	2,679	632,414
Persons ..	424,618	234,720	207,235	73,249	80,829	32,497	7,013	4,884	1,065,045
Discharges—									
Males ..	151,293	79,096	86,359	28,937	34,761	11,321	3,216	(a)	(a)
Females ..	245,569	139,035	107,421	39,147	41,063	18,313	3,375	(a)	(a)
Persons ..	396,862	218,131	193,780	68,084	75,824	29,634	6,591	4,576	993,482
Deaths—									
Males ..	7,177	4,540	3,408	1,490	1,366	668	104	(a)	(a)
Females ..	5,692	3,664	2,386	1,184	896	470	84	(a)	(a)
Persons ..	12,869	8,204	5,794	2,674	2,262	1,138	188	138	33,267
In-patients at end of year—									
Males ..	6,190	3,368	3,718	1,117	1,336	824	137	68	16,758
Females ..	8,697	5,017	3,943	1,374	1,407	901	97	102	21,538
Persons ..	14,887	8,385	7,661	2,491	2,743	1,725	234	170	38,296
Average daily number resident ..	16,154	8,370	7,237	2,559	2,656	1,715	236	165	39,092

(a) Not available.

In addition to those admitted to the hospitals, there are large numbers of out-patients treated. During 1956-57, there were 1,073,044 out-patients treated in New South Wales, 526,085 in Victoria, 579,495 in Queensland, 109,320 in South Australia, 115,000 (estimated)

in Western Australia, 91,743 in Tasmania, 75,963 in the Northern Territory and 12,117 in the Australian Capital Territory, making an estimated total for Australia of 2,583,600. The figures quoted refer to cases, as distinct from persons and attendances.

4. Revenue and Expenditure.—Details of the revenue and expenditure for the year 1956-57 are shown in the next table. The revenue includes the Commonwealth Hospital Benefits Scheme.

PUBLIC HOSPITALS: REVENUE AND EXPENDITURE, 1956-57.  
(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aus- tralia.
<i>Revenue—</i>									
Government aid ..	20,470	14,123	9,262	5,685	3,859	1,685	690	253	63,415
Commonwealth Hos- pital Benefits, etc.		1,896	3,136	708	1,297		33	28	
Municipal aid ..	(a)	20	..	165	..	..	..	..	185
Public subscriptions, legacies, etc. ..	143	1,802	3	113	68	1	..	..	2,130
Fees ..	7,766	3,768	785	797	1,155	502	24	50	14,847
Other ..	1,069	295	84	257	187	3	..	..	1,895
<i>Total ..</i>	<i>29,448</i>	<i>21,904</i>	<i>13,270</i>	<i>7,725</i>	<i>6,566</i>	<i>2,191</i>	<i>747</i>	<i>331</i>	<i>82,472</i>
<i>Expenditure—</i>									
Salaries and wages	16,170	9,586	6,045	2,780	3,115	1,430	341	186	39,653
Upkeep and repair of buildings and grounds ..	698	470	248	252	253	42	25	122	26,178
All other ordinary ..	7,818	7,044	4,924	1,511	1,794	723	254		
Capital ..	4,897	5,170	2,302	3,534	1,591	510	127	22	18,153
<i>Total ..</i>	<i>29,583</i>	<i>22,270</i>	<i>13,519</i>	<i>8,077</i>	<i>6,753</i>	<i>2,705</i>	<i>747</i>	<i>330</i>	<i>83,984</i>

(a) Included in "Other".

5. Summary.—A summary, for the years 1952-53 to 1956-57, of the number of public hospitals in Australia, medical and nursing staffs, beds, admissions, in-patients treated, out-patients, deaths, average daily number resident, revenue and expenditure is given in the following table.

PUBLIC HOSPITALS: AUSTRALIA.

Particulars.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Hospitals ..	694	699	709	721	731
Medical Staff ..	7,246	7,487	7,738	8,103	8,573
Nursing Staff ..	25,940	26,116	27,566	29,070	31,006
Beds and cots ..	50,076	50,812	52,979	53,550	55,801
Admissions during year ..	905,492	925,571	1,008,955	994,466	1,028,320
Total in-patients (cases) treated	939,856	961,288	1,046,171	1,032,668	1,065,045
Out-patients (cases) (a) ..	2,422,302	2,458,631	2,651,000	2,587,000	2,583,600
Deaths ..	28,604	29,403	32,489	31,417	33,267
Average daily no. resident ..	34,552	34,587	38,179	38,341	39,092
Revenue (b) ..	£'000	51,333	54,971	63,998	71,612
Expenditure (b) ..	£'000	50,834	54,190	64,323	74,568

(a) Partly estimated.  
for New South Wales.

(b) Up to and including 1954-55, excludes loan receipts and expenditure

§ 3. Leper Hospitals.

Isolation hospitals for the care and treatment of persons suffering from Hansen's disease (leprosy) have been established in New South Wales (Little Bay), Queensland (Peel Island, near Brisbane, and Fantome Island, North Queensland), Western Australia (Derby), and the Northern Territory (East Arm Settlement, near Darwin). In addition, special wards for the isolation of leprosy patients have been provided at Fairfield (Victoria) and Wooroloo (Western Australia). At the end of 1958, there were seven cases in residence at Little Bay, 13 at Peel Island, 24 at Fantome Island, 150 at Derby, 180 at East Arm Settlement, six at Fairfield and one at Wooroloo. Of the 381 cases, 321 were full-blood aborigines, 32 half-caste aborigines, five Asians and 23 Europeans.

§ 4. Mental Hospitals.

1. *General.*—The methods of compiling statistics of mental patients are fairly uniform throughout the States, but there is an element of uncertainty about possible differences in diagnosis in the early stages of the disease. Statistics of mental hospitals (except those relating to revenue and expenditure) include particulars of the two licensed houses in New South Wales. The figures exclude those of reception houses and observation wards in gaols. There are no mental hospitals in the Northern Territory or the Australian Capital Territory.

2. *Hospitals, Staff and Accommodation.*—Particulars regarding the number of hospitals, the medical and nursing staff, and accommodation are given in the following table for the year 1957. Figures for Victoria and Western Australia relate to 31st December, 1957. Figures for the other States relate to 30th June, 1957.

MENTAL HOSPITALS : NUMBER, STAFF, ACCOMMODATION, 1956-57.

Particulars.	N.S.W.	Vic. (a)	Q'land. (b)	S. Aust.	W. Aust. (a)	Tas.	Aust.
Number of Hospitals .. ..	14	14	5	2	4	1	40
Medical Staff—							
Males .. ..	45	} 92 {	12	12	8	4	} 188
Females .. ..	12		2	1	..	..	
Persons .. ..	(c) 57	92	14	13	8	4	188
Nursing Staff and Attendants—							
Males .. ..	1,034	1,078	616	216	185	86	3,215
Females .. ..	1,071	1,215	502	229	143	95	3,255
Persons .. ..	2,105	2,293	1,118	445	328	181	6,470
Accommodation—							
Number of beds and cots ..	12,627	8,175	4,694	2,656	1,655	810	30,617

(a) Year ended 31st December, 1957. (b) Includes the Epileptic Home. (c) In addition there are 59 visiting specialists who are paid for their services.

3. Patients.—Information regarding patients treated during 1956-57 is given in the following table:—

MENTAL HOSPITALS: PATIENTS, DEATHS, ETC., 1956-57.

Particulars.	N.S.W.	Vic. (a)	Q'land. (b)	S. Aust.	W. Aust. (a)	Tas.	Aust.
Number of patients at beginning of year—							
Males .. .. .	6,712	4,139	2,528	1,370	1,026	378	16,153
Females .. .. .	7,055	4,574	2,207	1,288	788	388	16,300
Persons .. .. .	13,767	8,713	4,735	2,658	1,814	766	32,453
Admissions and re-admissions (excluding absconders retaken and transfers from other mental hospitals)—							
Males .. .. .	1,013	1,925	688	253	154	193	4,226
Females .. .. .	1,217	1,524	703	290	117	199	4,050
Persons .. .. .	2,230	3,449	1,391	543	271	392	8,276
Number of persons treated during year(c)—							
Males .. .. .	7,725	6,064	3,216	1,623	1,180	571	20,379
Females .. .. .	8,272	6,098	2,910	1,578	905	587	20,350
Persons .. .. .	15,997	12,162	6,126	3,201	2,085	1,158	40,729
Discharges (including absconders not retaken)—							
Males .. .. .	550	1,346	464	180	65	161	2,766
Females .. .. .	728	857	538	198	32	163	2,516
Persons .. .. .	1,278	2,205	1,002	378	97	324	5,282
Deaths—							
Males .. .. .	481	341	234	118	93	39	1,306
Females .. .. .	497	431	233	113	50	42	1,366
Persons .. .. .	978	772	467	231	143	81	2,672
Number of patients at end of year—							
Males .. .. .	6,694	4,377	2,518	1,325	1,022	371	16,307
Females .. .. .	7,047	4,810	2,139	1,267	823	382	16,468
Persons .. .. .	13,741	9,187	4,657	2,592	1,845	753	32,775
Average daily number of patients resident—							
Males .. .. .	5,873	3,650	2,453	1,319	959	371	14,625
Females .. .. .	5,898	4,150	2,064	1,232	682	381	14,407
Persons .. .. .	11,771	7,800	4,517	2,551	1,641	752	29,032
Number of patients at end of year per 1,000 of population—							
Males .. .. .	3.68	3.21	3.51	2.99	2.84	2.20	3.33
Females .. .. .	3.91	3.59	3.14	2.95	2.42	2.41	3.45
Persons .. .. .	3.79	3.40	3.33	2.97	2.63	2.30	3.39
Average number of patients resident in mental hospitals per 1,000 of population—							
Males .. .. .	3.26	2.71	3.46	3.01	2.70	2.21	3.01
Females .. .. .	3.30	3.13	3.07	2.91	2.03	2.40	3.05
Persons .. .. .	3.28	2.92	3.27	2.96	2.37	2.31	3.03

(a) Year 1957. (b) Includes persons treated at the Epileptic Home. (c) Excludes patients transferred to other institutions.

Persons who are well advanced towards recovery are allowed to leave the hospitals and live with their relatives or friends, but they are under supervision and their names are kept in the records. These persons have been included in the above table as patients at the end of the year.

4. Revenue and Expenditure, 1956-57.—Mental hospitals are maintained by the State Governments. They derive a small proportion of their revenue from other sources (chiefly patients' fees, pharmaceutical benefits and sale of farm produce), but in 1956-57 this source provided less than 4 per cent. of all their revenue. For a statement on the funds provided by the Commonwealth Government for mental hospitals, see Part B of this Chapter, § 2, para. 3, Mental Hospitals, page 644.

In New South Wales, the expenditure includes the cost of Broken Hill patients treated in South Australian mental hospitals:—

MENTAL HOSPITALS : FINANCES, 1956-57.

(£.)

Particulars.	N.S.W.	Vic.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	Australia.
<i>Revenue (excluding Government Grants)—</i>							
Fees of patients	323,492		78,420	49,112	35,078	6,972	493,074
Other ..	(b) 89,085	31,502	13,437	47,452	14,497	697	196,670
<i>Total ..</i>	<i>412,577</i>	<i>31,502</i>	<i>91,857</i>	<i>96,564</i>	<i>49,575</i>	<i>7,669</i>	<i>689,744</i>
<i>Expenditure—</i>							
Salaries and wages	2,568,382	2,592,496	1,073,560	539,841	488,434	235,576	7,498,289
Upkeep and repair of buildings, etc.	287,137	300,682	11,400	64,083	18,649	9,773	691,724
All other ..	1,711,707	2,184,330	804,258	401,757	250,078	115,022	5,467,152
Capital(c) ..	1,104,978	1,709,869	251,401	297,145	212,127	225,558	3,801,078
<i>Total ..</i>	<i>5,672,204</i>	<i>6,787,377</i>	<i>2,140,619</i>	<i>1,302,826</i>	<i>969,288</i>	<i>585,929</i>	<i>17,458,243</i>

(a) Includes the Epileptic Home. (b) Includes £26,908 Commonwealth Hospital Benefits. (c) Capital expenditure includes purchases of land, cost of new buildings, and additions to buildings.

5. Summary for Australia.—The following table gives a summary relating to mental hospitals in Australia for each of the years 1952-53 to 1956-57:—

MENTAL HOSPITALS : SUMMARY, AUSTRALIA.

Particulars.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Hospitals .. .. .	34	34	37	39	40
Medical Staff .. .. .	159	140	144	161	188
Nursing Staff and Attendants .. .. .	5,276	5,541	5,748	6,030	6,470
Beds .. .. .	29,069	29,244	29,690	30,089	30,617
Admissions .. .. .	5,856	5,628	5,722	7,524	8,276
Discharged as recovered, relieved, etc.	2,907	3,126	3,021	4,235	5,282
Deaths .. .. .	2,244	2,178	2,276	2,529	2,672
Patients at end of year .. .. .	30,474	30,798	31,223	32,453	32,775
Average daily number of patients resident .. .. .	27,478	27,921	28,012	28,639	29,032
Revenue (excluding Government Grants) .. .. .	£ 866,561	888,681	654,486	566,556	689,744
Total Expenditure .. .. .	£ 10,713,747	11,680,996	13,189,269	15,342,044	17,458,243

6. **Number of Mental Patients.**—The total number returned as under treatment at the end of each year shows a slight increase during the period but the proportion to total population shows a slight decline. A more rational attitude towards the treatment of mental cases has resulted in a greater willingness in recent years to submit afflicted persons to treatment at an early stage, and an increase in the number of recorded cases, therefore, does not necessarily imply an increase in mental diseases. The difference between States in the number of patients in mental hospitals per 1,000 of population may also to some extent be the result of differences in practice. Figures for Victoria and Western Australia relate to 31st December of the year shown; figures for the other States relate to 30th June of the year shown.

**PATIENTS IN MENTAL HOSPITALS.**

State.	1953.	1954.	1955.	1956.	1957.
<b>NUMBER.</b>					
New South Wales .. .. .	12,979	13,169	13,422	13,767	13,741
Victoria .. .. .	7,936	7,795	7,934	8,713	9,187
Queensland(a) .. .. .	4,554	4,621	4,704	4,735	4,657
South Australia .. .. .	2,534	2,644	2,613	2,658	2,592
Western Australia .. .. .	1,721	1,798	1,790	1,814	1,845
Tasmania .. .. .	750	771	760	766	753
<b>Australia .. .. .</b>	<b>30,474</b>	<b>30,798</b>	<b>31,223</b>	<b>32,453</b>	<b>32,775</b>
<b>PER 1,000 OF POPULATION.</b>					
New South Wales .. .. .	3.84	3.85	3.85	3.87	3.79
Victoria .. .. .	3.28	3.14	3.11	3.31	3.40
Queensland(a) .. .. .	3.53	3.51	3.50	3.45	3.33
South Australia .. .. .	3.27	3.32	3.19	3.13	2.97
Western Australia .. .. .	2.72	2.77	2.67	2.65	2.63
Tasmania .. .. .	2.47	2.50	2.42	2.40	2.30
<b>Australia .. .. .</b>	<b>3.44</b>	<b>3.41</b>	<b>3.38</b>	<b>3.43</b>	<b>3.39</b>

(a) Includes the Epileptic Home.

## CHAPTER XVIII.

### WELFARE SERVICES.

#### A. COMMONWEALTH SOCIAL SERVICES.

##### § 1. Introduction.

Under the provisions of section 51 of the Constitution, the Commonwealth Government is empowered to legislate on :—

“(xxiii) Invalid and old-age pensions:

(xxiiiA) The provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorize any form of civil conscription), benefits to students and family allowances:”.

The latter paragraph was inserted in the constitution after being accepted by the electors at a referendum on 28th September, 1946. The enabling Act was assented to on 19th December, 1946.

Before 1947, each social service benefit was paid under a separate Act. On 1st July, 1947, with the passage of the Social Services Consolidation Act 1947, all Acts providing social service benefits were amalgamated. This Act eliminated certain anomalies and obsolete provisions and changed the title “old-age pension” to “age pension”. The word “Consolidation” was dropped from the short title of the Act in 1954. The Act is at present styled the Social Services Act 1947–1958.

The social service benefits provided by the Commonwealth Government, and the date on which each came into operation, are :—

Age pension	..	..	..	..	1st July, 1909
Child endowment (for other than first child)	..	..	..	..	1st July, 1941
Child endowment (for first child)	..	..	..	..	20th June, 1950
Commonwealth Rehabilitation Service					10th December, 1948
Funeral benefit	..	..	..	..	1st July, 1943
Invalid pension	..	..	..	..	15th December, 1910
Maternity allowance	..	..	..	..	10th October, 1912
Sickness benefit	..	..	..	..	1st July, 1945
Special benefit	..	..	..	..	1st July, 1945
Unemployment benefit	..	..	..	..	1st July, 1945
Widow's pension	..	..	..	..	30th June, 1942

Information concerning these benefits appears in later sections of this chapter (pp. 669–682). Particulars of benefits provided under the National Health Service appear in Chapter XVII.—Public Health, pages 643–649.

##### § 2. Commonwealth Expenditure on Social and Health Services.

1. **National Welfare Fund.**—The National Welfare Fund was established by the National Welfare Fund Act 1943 to finance a scheme of national welfare. In introducing this measure to Parliament, the Prime Minister said that part of the scheme was to be introduced immediately, and part was to be deferred until after the end of the war. A certain balance, which would therefore accrue to the fund, would be invested in Commonwealth securities, and would thus provide finance for the war effort.

The fund operated from 1st July, 1943. At its commencement, it was used to finance funeral benefits and maternity allowances. Other social and health benefits were made a charge on the fund from time to time. At present, expenditure on all benefits except repatriation and a few minor social and health benefits is met from the fund. The fund is used only to finance the benefits themselves; it is not used to finance the cost of administering the benefits, nor on capital works associated with the benefits.

For particulars of the income of the fund, see Chapter XXI., Public Finance, Part A, § 2, III., para. 6. The following table sets out expenditure from the fund during 1957–58.

**COMMONWEALTH EXPENDITURE ON SOCIAL AND HEALTH SERVICES,  
1957-58.  
(£'000.)**

Service.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Over-seas.	Total.
<b>Social Services—</b>										
Age and Invalid Pensions .. .. .	50,353	29,796	18,343	10,716	8,077	4,034	45	147	66	121,577
Child Endowment .. .. .	21,219	15,719	9,117	5,430	4,572	2,237	180	248	12	58,734
Commonwealth Rehabilitation Service .. .. .	154	182	68	102	80	22	..	..	..	608
Funeral Benefits .. .. .	129	88	46	28	23	11	..	..	..	325
Maternity Allowances .. .. .	1,281	969	547	323	271	138	11	18	2	3,560
Unemployment Benefits .. .. .	1,727	1,011	1,282	306	482	104	2	6	..	4,920
Sickness Benefits .. .. .	792	406	305	157	131	59	2	5	..	1,857
Special Benefits(a) .. .. .	162	222	97	37	19	16	..	1	..	554
Widows' Pensions .. .. .	3,901	2,331	1,676	844	708	339	6	19	8	9,832
<b>National Health Services—</b>										
Hospital Benefits .. .. .	4,313	2,662	1,559	928	929	368	38	26	..	10,823
Medical Benefits .. .. .	3,117	1,682	744	707	657	179	..	..	..	7,086
Medical Benefits for Pensioners .. .. .	1,450	786	392	278	216	70	..	6	..	3,198
Nutrition of Children .. .. .	1,138	675	400	212	153	159	1	18	..	2,756
Pharmaceutical Benefits .. .. .	5,292	3,629	1,664	1,035	864	317	..	110	..	12,911
Pharmaceutical Benefits for Pensioners .. .. .	965	455	335	183	139	46	..	..	..	2,123
Tuberculosis Campaign—										
Allowances .. .. .	447	296	227	145	76	64	..	..	..	1,255
Maintenance (b) .. .. .	1,715	1,027	770	357	444	182	..	16	..	4,511
Miscellaneous(c) .. .. .	31	41	96	7	13	19	11	d 637	..	855
<b>Total .. .. .</b>	<b>98,186</b>	<b>61,977</b>	<b>37,668</b>	<b>21,795</b>	<b>17,854</b>	<b>8,364</b>	<b>296</b>	<b>1,257</b>	<b>88</b>	<b>247,485</b>

(a) Includes special benefits to migrants in reception and training centres. (b) Paid to the State Governments as a contribution towards the maintenance of institutions for the treatment of tuberculosis. (c) This item covers the cost of district laboratory services, the free supply of prophylactic materials and biological products (e.g., insulin, poliomyelitis and diphtheria prophylactic), the supply and maintenance of hearing aids for children, subsidies to voluntary organizations conducting home-nursing services, and certain costs associated with the blood transfusion services of the Australian Red Cross Society. (d) Includes an amount of £536,927 for the production of poliomyelitis vaccine.

Expenditure from the fund during each of the years 1953-54 to 1957-58 is shown in the following table. A graph showing expenditure from the fund from 1940-41 to 1957-58 is to be found on page 673.

**COMMONWEALTH EXPENDITURE ON SOCIAL AND HEALTH SERVICES.  
(£'000.)**

Service.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>Social Services—</b>					
Age and Invalid Pensions .. .. .	81,293	88,006	101,625	109,210	121,577
Child Endowment (a) .. .. .	50,761	52,530	60,381	57,037	58,734
Commonwealth Rehabilitation Service .. .. .	429	451	505	568	608
Funeral Benefits .. .. .	288	304	319	341	325
Maternity Allowances .. .. .	3,226	3,362	3,410	3,482	3,560
Unemployment, Sickness and Special Benefits .. .. .	4,543	2,640	2,563	4,000	7,331
Widows' Pensions .. .. .	6,626	6,862	7,723	8,862	9,832
<b>National Health Services—</b>					
Hospital Benefits .. .. .	8,330	9,321	9,553	9,813	10,823
Medical Benefits .. .. .	1,434	4,210	5,413	6,146	7,086
Medical Benefits for Pensioners .. .. .	2,115	2,516	2,874	2,999	3,198
Mental Institution Benefits .. .. .	495	225	..	..	..
Nutrition of Children .. .. .	1,999	2,237	2,405	2,607	2,756
Pharmaceutical Benefits .. .. .	8,219	9,445	10,380	9,924	12,911
Pharmaceutical Benefits for Pensioners .. .. .	1,011	1,295	1,508	1,793	2,123
Tuberculosis Campaign—					
Allowances .. .. .	1,877	1,904	1,690	1,461	1,255
Maintenance .. .. .	3,703	3,753	4,007	4,755	4,511
Miscellaneous .. .. .	216	258	510	925	855
<b>Total .. .. .</b>	<b>176,565</b>	<b>189,319</b>	<b>214,866</b>	<b>223,923</b>	<b>247,485</b>

(a) See footnote to table on p. 675.

2. Capital Expenditure.—Particulars of Commonwealth expenditure on capital works are given in Chapter XVII., Public Health, Division B, Section 2, para. 3, Mental Hospitals

and para. 6, Anti-tuberculosis Campaign. Grants are made to private organizations for the construction of homes for elderly people (*see* para. 4, p. 683).

3. **Administrative Expenditure.**—Information concerning the cost of administering each benefit separately is not compiled. Particulars of the cost of administering the Department of Health and the Department of Social Services may be found in Chapter XXI, Public Finance, Division A, Section 2, III., para. 5.

### § 3. Age and Invalid Pensions.

Age pensions are payable to men, 65 years of age and over, and women, 60 years of age and over, who have resided in Australia continuously for at least 20 years, which need not be immediately prior to the date of claim for a pension. Absence in a Territory of the Commonwealth, any periods of absence during which a person's home remained in Australia, and absences in certain other circumstances including, in the case of a claimant who has had at least 18 years' residence, occasional absences aggregating up to 2 years plus 6 months for every year of residence in excess of 18 years, are counted as residence.

Invalid pensions are payable to persons, 16 years of age and over, who have resided in Australia for a continuous period of five years (including any occasional absences not exceeding, in total, six months), and who are permanently incapacitated for work or permanently blind. The degree of permanent incapacity has to be not less than 85 per cent. and the claimant must have become permanently incapacitated or permanently blind while in Australia or during a temporary absence from Australia, but this condition is waived if he has resided in Australia for not less than 20 years (continuous or otherwise), whether any such period was before or after the occurrence of the permanent incapacity or blindness.

Pensions may be granted to aboriginal natives of Australia who have been granted exemption from State control laws, or who, in any State where exemption is not provided for, are considered, by reason of their character, intelligence and social development, to be suitable persons to receive pensions.

A pension is not payable to :—an alien (except a woman who, before marriage, was a British subject) ; a person who has deprived himself of property or income, or who has brought about his incapacity, in order to qualify for a pension ; a person in receipt of income of £409 10s. per annum (£819 per annum for a married couple) ; a person who owns property, apart from his permanent home and other exempt property, to the net value of more than £1,750 (£3,500 for married persons) ; or a person who has deserted his or her spouse or children for the six months preceding the date of the claim (age pension only).

Since 24th October, 1957, the maximum rate of pension has been £227 10s. per annum (£4 7s. 6d. a week). The wife of an invalid pensioner (or an age pensioner who is permanently incapacitated for work or permanently blind) may be granted a wife's allowance of not more than £91 per annum (£1 15s. a week). A child's allowance of £29 18s. per annum (11s. 6d. a week) is also paid to an invalid pensioner who is maintaining a child under 16 years of age. If a pensioner is maintaining more than one child, his pension is increased by £26 per annum (10s. a week) for each additional child. Supplementary assistance of £26 per annum (10s. a week) is payable to single pensioners and to married pensioners whose spouses do not receive pension or allowance, if the pensioner pays rent and is deemed to be entirely dependent on his pension. At 30th June, 1958, 392,097 age pensioners (78.9% of all age pensioners) and 67,957 invalid pensioners (87.7% of all invalid pensioners) were receiving an annual pension of £227 10s. or more.

A pensioner who is an inmate of a benevolent home is paid so much of his pension as does not exceed £79 6s. per annum (£1 10s. 6d. a week) and the balance, if any, of the pension is paid to the institution for his maintenance.

Age and invalid pensions (other than invalid pensions paid to blind persons) and allowances paid to wives of invalid pensioners (but not the child's allowance of 11s. 6d. a week) are subject to a means test. They are reduced by the amount by which a pensioner's income from sources other than his pension exceeds £182 per annum (£3 10s. a week). For this purpose, certain types of allowances received are not counted as income. These include gifts or allowances received from the pensioner's children, benefits from friendly societies, payments for illness, infirmity or old age from a trade union, State food relief, maternity allowances, child endowment or any other payment received for children maintained by the pensioner, allowances received under the national health service, interest on war gratuities, income received from property owned by a pensioner or his spouse and income such as dividends on shares and interest from bonds or on money in the bank.

The annual rate of pension or allowance is further reduced by £1 for every complete £10 by which the value of property owned by a pensioner or his spouse exceeds £200, and

no pension is payable if the value of the property exceeds £1,750. For this purpose, certain types of property are disregarded. They include the permanent home of the pensioner, his furniture and personal effects, the surrender value (up to £750) of life insurance policies, the capital value of annuities or contingent interests, the present value of any reversionary interests, inheritances not received and war gratuities.

For the purposes of the administration of the means test, the income and property of a married person is deemed to be half the total income and property of the husband and wife (unless they are legally separated). This provision means that the pension of a married pensioner, whether or not his spouse is a pensioner, will not be reduced because of his income from other sources unless that income exceeds £364 per annum (£7 a week), nor will his pension be reduced on account of the value of his property unless that value exceeds £400.

The following statement shows the rates of pension at 1st July, 1909, and the rates as they have been varied since that date, subject in all cases, to income and property qualifications :—

#### MAXIMUM RATES OF PENSION PAYABLE.(a)

Date from which Operative.	Maximum Pension Payable.		Limit of Income (including Pension) per Annum.	Date from which Operative.	Maximum Pension Payable.		Limit of Income (including Pension) per Annum.
	Per Week.	Per Annum.			Per Week.	Per Annum.	
1st July, 1909	s. d.	£ s.	£ s.	7th January, 1943(c)	s. d.	£ s.	£ s.
12th October, 1916 ..	10 0	26 0	52 0	1st April, 1943(c)	26 0	67 12	100 2
1st January, 1920 ..	12 6	32 10	58 10	19th August, 1943(c)	26 6	68 18	101 8
13th September, 1923	15 0	39 0	65 0	25th November, 1943(c)	27 0	70 4	102 14
8th October, 1925 ..	17 6	45 10	78 0	25th November, 1943(e)	26 6	68 18	101 8
23rd July, 1931 ..	20 0	52 0	84 10	5th July, 1945 ..	27 0	70 4	102 14
13th October, 1932(b)	17 6	45 10	78 0	13th August, 1946	32 6	84 10	117 0
26th October, 1933 ..	15 0	39 0	71 10	3rd July, 1947 ..	32 6	84 10	136 10
4th July, 1935(c)	17 6	45 10	78 0	21st October, 1948	37 6	97 10	149 10
24th September, 1936	18 0	46 16	79 6	2nd November, 1950	42 6	110 10	188 10
9th September, 1937 ..	19 0	49 8	81 8	1st November, 1951	50 0	130 0	208 0
26th December, 1940 ..	20 0	52 0	84 10	2nd October, 1952	60 0	156 0	234 0
3rd April, 1941(c)	21 0	54 12	87 2	29th October, 1953	67 6	178 10	253 10
11th December, 1941	21 6	55 18	88 8	14th October, 1954	70 0	182 0	286 0
2nd April, 1942(c)	23 6	61 2	93 12	27th October, 1955	70 0	182 0	364 0
2nd April, 1942(d)	24 0	62 8	94 8	24th October, 1957	80 0	208 0	390 0
1st October, 1942(c)	25 0	65 0	97 10		87 6	227 10	409 10
	25 6	66 6	98 16				

(a) Excludes amounts payable for wives and children of invalid pensioners. (b) Additional pension of £6 10s. per annum (2s. 6d. a week) was payable to a pensioner with no income. Pensioners with income of less than 2s. 6d. a week were paid additional pension of 2s. 6d. less the amount of income. (c) Variation according to change in retail price index number. (d) Increase paid on 9th July, 1942, retrospective to 2nd April, 1942. (e) Rate restored to £70 4s. per annum under National Security (Supplementary) Regulations 112a—Statutory Rule 315 of 1943.

NOTE.—Provision for variations according to retail price index numbers was repealed on 6th April, 1944.

During 1957–58, 51,333 age pension claims were granted, 1,258 pensioners were transferred from the invalid pension list, and 42,017 pensions expired through cancellations and deaths. The number of age pensioners at 30th June, 1958, was 496,757, of whom 160,998 (or 32 per cent.) were males, and 335,759 (or 68 per cent.) were females. Pensioners in benevolent homes have been included in these figures; in past years they were excluded.

The recorded ages of the 51,333 persons (19,781 males and 31,552 females) to whom age pensions were granted during the year 1957–58 varied considerably, ranging from 8,456 at age 60 to eight who were over 97; 37,882 were in the 60–69 age-group. The conjugal condition of these new pensioners was as follows :—Males—single, 2,432; married, 13,956; and widowed, 3,393 : Females—single, 3,846; married, 17,757; and widowed, 9,949.

During 1957-58, 12,640 invalid pension claims were granted, 5,844 pensions ceased through cancellation or death, and 1,258 invalid pensioners were transferred to the age pension list. The number of invalid pensioners at 30th June, 1958, was 77,451, of whom 41,907 (or 54 per cent.) were males and 35,544 (or 46 per cent.) were females. Pensioners in benevolent homes have been included.

The recorded ages of the 12,640 persons (7,457 males and 5,183 females) to whom invalid pensions were granted during 1957-58 varied widely, 1,164 (9 per cent.) were in the 16-19 years age-group, 2,215 (17 per cent.) were in the 20-44 years age-group; 6,377 (51 per cent.) were in the 45-59 years age-group, 2,278 (18 per cent.) were in the 60-64 years age-group, and 606 (5 per cent.) were over 65 years of age.

The conjugal condition of persons to whom invalid pensions were granted during the year was as follows:—Males—single, 2,470; married, 4,433; and widowed, 554; Females—single, 1,855; married, 2,468; and widowed, 860.

## AGE AND INVALID PENSIONS, 30th JUNE, 1958.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Age Pensions in force—</b>									
Males .. .. .	65,183	35,973	27,758	14,818	12,094	4,884	87	201	160,998
Females .. .. .	140,727	87,563	45,046	30,689	21,030	10,230	74	400	335,759
Persons .. .. .	205,910	123,536	72,804	45,507	33,124	15,114	161	601	496,757
<b>Masculinity(a)</b> .. .. .	46.32	41.08	61.62	48.28	57.51	47.74	117.57	50.25	47.95
<b>Invalid Pensions in force—</b>									
Males .. .. .	15,123	11,333	7,806	2,990	3,105	1,478	38	34	41,907
Females .. .. .	13,670	8,686	6,424	2,872	2,414	1,405	15	58	35,544
Persons .. .. .	28,793	20,019	14,230	5,862	5,519	2,883	53	92	77,451
<b>Masculinity(a)</b> .. .. .	110.63	130.47	121.51	104.11	128.62	105.20	253.33	58.62	117.90

(a) Number of males to each 100 females.

The sum disbursed in age and invalid pensions in 1957-58, including the amount paid to homes for the maintenance of pensioners and allowances to wives of invalid pensioners, represented an expenditure of £12 9s. 7d. per head of population as compared with £11 9s. 1d. in 1956-57.

The following table gives details of age and invalid pensions for the years 1953-54 to 1957-58:—

## AGE AND INVALID PENSIONS: SUMMARY, AUSTRALIA.

Year ended 30th June—	Pensioners at End of Year.				Amount Paid to Pensioners, (b)	Total Payment to Pensioners and Homes.(b)	Average Fortnightly Pension as at 30th June.		
	Age.		Invalid.	Total.			Age.	Invalid.	Age and Invalid Combined.
	No.	Rate. (a)							
			No.	No.	£	£	s. d.	s. d.	s. d.
1954 ..	397,784	423	73,732	c471,516	80,898,725	81,293,003	134 2	136 10	134 7
1955 ..	425,556	439	78,498	c504,054	87,614,112	88,006,077	134 7	137 7	135 1
1956 ..	446,207	449	82,775	c528,982	101,242,275	101,625,068	153 7	156 10	154 1
1957 ..	465,781	460	88,236	554,017	108,779,470	109,209,972	152 10	157 8	153 7
1958(d)	496,757	482	77,451	574,208	121,110,320	121,577,042	166 11	171 9	167 7

(a) Number of pensioners per 1,000 persons of pensionable age (males aged 65 years and over and females aged 60 years and over). (b) Includes allowances to wives of invalid pensioners. (c) Excludes age and invalid pensioners in benevolent homes, at 30th June, 1954, 6,463; 1955, 6,132; and 1956, 6,244. (d) On 30th June, 1958, 13,205 invalid pensioners in New South Wales were transferred to their correct designation of age pensioners.

## § 4. Child Endowment.

A person who is resident in Australia and has the custody, care and control of one or more children under the age of sixteen years, or an approved institution of which children are inmates, shall be qualified to receive an endowment in respect of each child.

Endowment may be paid in respect of a child whose father is not a British subject if the child was born in Australia, the mother is a British subject, or the child is likely to remain permanently in Australia. A child born during the mother's temporary absence from Australia is deemed to have been born in Australia. Endowment is payable to aboriginal natives of Australia unless they are nomadic, or unless the child concerned is wholly or mainly dependent on the Commonwealth or a State, and also in respect of children of members of the naval, military or air forces of the United Kingdom who are serving with the Australian forces. Endowment is payable from the time of arrival of the children in Australia. There are provisions to meet cases of families divided by reason of divorce, separation, unemployment or death of a parent. There is no means test.

Endowment is restricted to dependent children under 16 years of age. From 1st July, 1941, the rate of endowment was 5s. a week for each child in excess of one in a family, and for each child under 16 in an approved institution. The rate was increased to 7s. 6d. a week in June, 1945, and to 10s. a week in November, 1948. Since June, 1950, the rates of endowment have been 5s. a week for the first child in a family, 10s. a week for each other child in a family, and 10s. a week for each child in an institution.

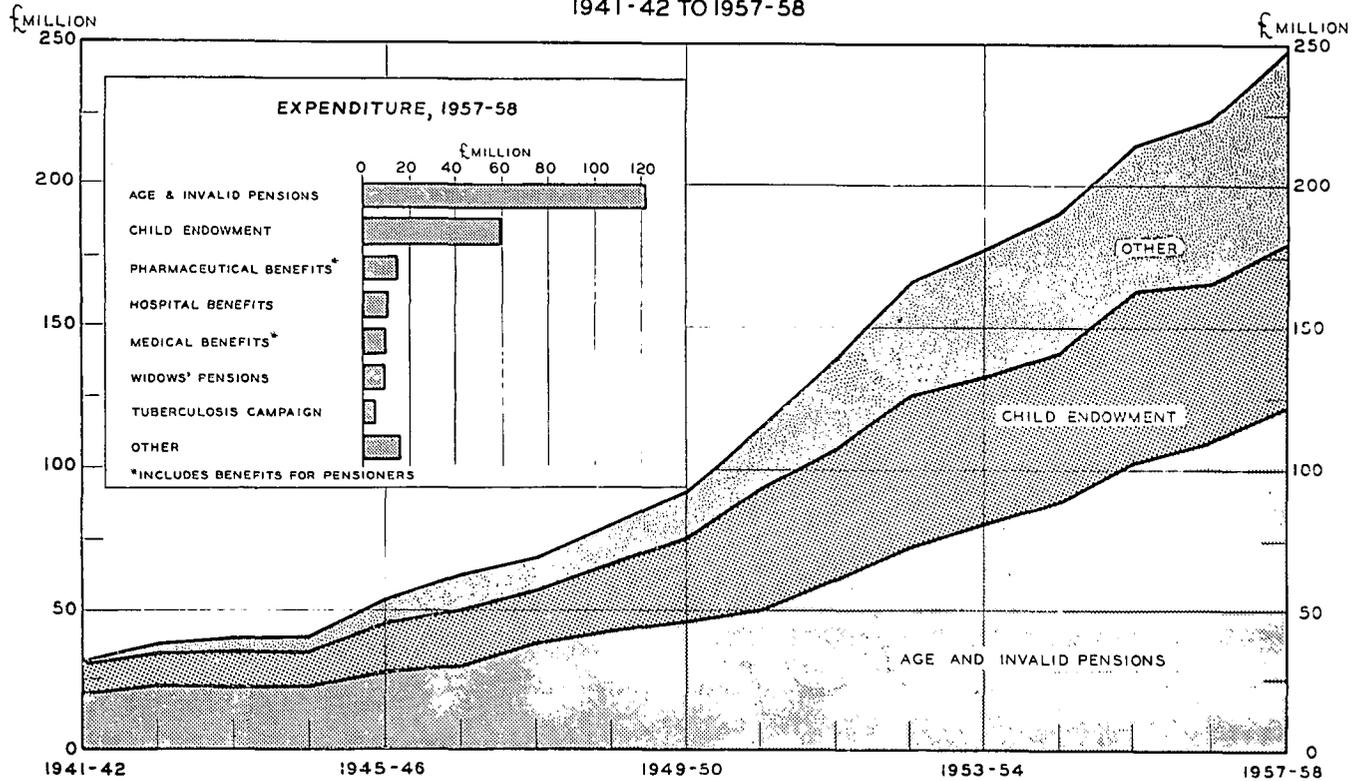
The number of families receiving child endowment at 30th June, 1958, was 1,415,378, an increase of 37,209 or 2.7 per cent. during the year. The following table shows, for each State and Territory, the number of claims for child endowment in force and the number of endowed children at 30th June, 1958.

## CHILD ENDOWMENT: CLAIMS AND ENDOWED CHILDREN, 30th JUNE, 1958.

State or Territory.	Family Groups.			Institutions.		Total. Endowed Children.
	Claims in force.	Endowed Children.		Number.	Endowed Child Inmates.	
		Number.	Average number per claim.			
New South Wales ..	531,556	1,111,199	2.09	123	5,973	1,117,172
Victoria .. ..	383,926	818,258	2.13	99	5,032	823,290
Queensland .. ..	204,503	466,846	2.28	48	3,306	470,152
South Australia ..	132,079	286,358	2.17	46	1,492	287,850
Western Australia ..	104,472	234,265	2.24	64	3,467	237,732
Tasmania .. ..	49,812	114,832	2.31	19	443	115,275
Northern Territory ..	3,043	6,658	2.19	16	2,533	9,191
Australian Capital Territory ..	5,818	12,923	2.22	..	..	12,923
Overseas .. ..	169	360	2.13	..	..	360
<b>Total ..</b>	<b>1,415,378</b>	<b>3,051,699</b>	<b>2.16</b>	<b>415</b>	<b>22,246</b>	<b>3,073,945</b>

# COMMONWEALTH EXPENDITURE ON SOCIAL AND HEALTH SERVICES

1941-42 TO 1957-58





The following table shows, as at 30th June, 1958, the number of claims in force and the number of endowed children, classified according to the number of endowed children in the family:—

## CHILD ENDOWMENT: ENDOWED CHILDREN IN FAMILIES, 30th JUNE, 1958.

Number of Endowed Children in Family.	Claims in Force.	Endowed Children.	Number of Endowed Children in Family.	Claims in Force.	Endowed Children.
1 .. ..	507,244	507,244	10 .. ..	355	3,550
2 .. ..	472,221	944,442	11 .. ..	93	1,023
3 .. ..	256,175	768,525	12 .. ..	32	384
4 .. ..	110,873	443,492	13 .. ..	7	91
5 .. ..	42,037	210,185	14 .. ..	2	28
6 .. ..	16,238	97,428	15 .. ..	1	15
7 .. ..	6,468	45,276	18 .. ..	1	18
8 .. ..	2,681	21,448			
9 .. ..	950	8,550	<b>Total ..</b>	<b>1,415,378</b>	<b>3,051,699</b>

The following table shows the annual liability in respect of Child Endowment at 30th June, 1958, and the actual expenditure thereon for the year 1957-58 in each State and Territory.

## CHILD ENDOWMENT: LIABILITY AND EXPENDITURE, 1957-58.

(£.)

State or Territory.	Annual Liability at 30th June, 1958.			Total Payments to Endowees and Institutions during 1957-58.
	Family Groups.	Institutions.	Total.	
New South Wales ..	21,980,946	155,298	22,136,244	21,219,047
Victoria .. ..	16,283,670	130,832	16,414,502	15,718,843
Queensland .. ..	9,479,457	85,956	9,565,413	9,117,571
South Australia ..	5,728,281	38,792	5,767,073	5,429,826
Western Australia ..	4,732,754	90,142	4,822,896	4,571,540
Tasmania .. ..	2,338,076	11,518	2,349,594	2,236,919
Northern Territory ..	133,549	65,858	199,407	179,975
Australian Capital Territory .. ..	260,364	..	260,364	247,816
Overseas .. ..	7,163	..	7,163	12,024
<b>Total .. ..</b>	<b>60,944,260</b>	<b>578,396</b>	<b>61,522,656</b>	<b>58,733,561</b>

The following table shows, for Australia, the number of claims, the number of endowed children and the annual liability at 30th June for each of the years from 1954 to 1958 and the actual expenditure for the years 1953-54 to 1957-58.

## CHILD ENDOWMENT SUMMARY: AUSTRALIA.

At 30th June.	Family Group Claims.	Institutions.	Endowed Children.	Annual Liability for Endowment. (a)	Total Payments. (a) (b)
				£	£
1954 .. ..	1,280,439	387	2,716,974	53,995,617	50,760,799
1955 .. ..	1,304,227	392	2,788,561	55,547,635	52,529,902
1956 .. ..	1,339,807	392	2,875,664	57,349,773	60,380,685
1957 .. ..	1,378,169	397	2,978,191	59,516,769	57,036,962
1958 .. ..	1,415,378	415	3,073,945	61,522,656	58,733,561

(a) A number of endowments are paid every twelve weeks. During two years out of every three, there are four such payments, but every third year there are five. Since the size of the amount causes considerable fluctuations in the figures for expenditure from year to year, figures for annual liability reflect trends in expenditure on child endowment more accurately than do figures for expenditure.

(b) Year ended 30th June.

### § 5. Commonwealth Rehabilitation Service.

The Commonwealth Rehabilitation Service has been set up to help persons who are too disabled to work or who have had to give up their employment because of sickness or injury. It aims at restoring disabled persons so they can earn a living and lead useful lives. They are given suitable treatment and training, the cases selected being those in which the person's disability is remediable and there are reasonable prospects of his engaging in a suitable vocation within three years after the commencement of treatment or training.

The benefits are available to invalid pensioners, persons receiving unemployment or sickness benefits, persons receiving tuberculosis allowances and persons over 14 but under 16 years of age who, without treatment and training, would be likely to qualify for an invalid pension on reaching the age of 16 years. Other persons may participate in the scheme upon reimbursement of the cost of treatment and training. During the treatment stage of rehabilitation, the payment of pension or benefit is continued. If, however, vocation a training is provided, the pension or benefit is suspended and the trainee is paid instead a rehabilitation allowance equivalent to the amount of invalid pension for which he is qualified, or which would be payable if he were qualified to receive an invalid pension, together with the amount of any wife's and child's allowances, plus a training allowance of £1 10s. a week.

Living-away-from-home allowances are paid where necessary. Fares and living expenses (including those of an attendant where required) incurred in connexion with treatment, training or attendance for an interview or for medical examination may also be paid. A person receiving treatment or training may be provided, free of charge, with necessary artificial replacements, surgical aids and appliances. He may also be provided with books, equipment and tools of trade, costing not more than £40. If these are retained by him, he is required to pay the cost, but payments may be made by small instalments after he has commenced in employment.

If the treatment or vocational training does not result in the trainee being able to engage in employment, his right to the continuance of his pension or benefit is not prejudiced.

The numbers of persons receiving benefits who were examined, accepted, trained and placed in employment during the year 1957-58 are shown in the following table :—

#### COMMONWEALTH REHABILITATION SERVICE : AUSTRALIA, 1957-58.

Type.	Examined.	Accepted.	Completed Training.	Placed in Employment.	
				After Training.	Without Training.
Invalid Pensioners .. .. .	11,520	326	91	75	48
Unemployment and Sickness Beneficiaries .. .. .	6,756	934	132	128	449
Recipients of Tuberculosis Allowance .. .. .	663	166	79	99	46
Persons Aged 14-15 years .. .. .	188	91	24	19	32
Persons provided with rehabilitation on payment of the cost.. .. .	127	72	2	1	65
<b>Total .. .. .</b>	<b>19,254</b>	<b>1,589</b>	<b>328</b>	<b>322</b>	<b>640</b>

### § 6. Funeral Benefits.

A funeral benefit of up to £10 is payable to the person who has paid, or is liable to pay, the cost of the funeral of an age or invalid pensioner or of a claimant who, but for his death, would have been granted an age or invalid pension, or of a person who at the time of his death was receiving, or was a claimant for, a tuberculosis allowance, if he would otherwise have been qualified to receive an age or invalid pension. Where the cost of the funeral has been partly met by payment from a contributory funeral benefit fund of an organization other than a friendly society, funeral benefit is payable to the extent of the amount (not above £10) by which the cost of the funeral exceeded the amount paid from the fund. A funeral benefit is not payable to a person administering a contributory funeral benefit fund.

The following table shows the number of funeral benefits which were paid in each State and Territory for the years 1953-54 to 1957-58.

## FUNERAL BENEFITS GRANTED, AUSTRALIA.

State.	Benefits Granted.				
	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
New South Wales .. ..	11,397	13,108	13,148	13,927	12,895
Victoria .. .. .	8,269	7,921	8,216	9,262	8,740
Queensland .. .. .	4,051	4,590	4,501	4,830	4,565
South Australia .. ..	2,529	2,668	2,864	2,974	2,802
Western Australia .. ..	1,871	2,045	2,335	2,366	2,358
Tasmania .. .. .	913	1,053	918	1,002	1,097
Northern Territory .. ..	(a)	3	6	2	6
Australian Capital Territory ..	(b)	20	31	28	33
<b>Australia .. .. .</b>	<b>29,030</b>	<b>31,408</b>	<b>32,019</b>	<b>34,391</b>	<b>32,496</b>

(a) Included with South Australia.

(b) Included with New South Wales.

## § 7. Maternity Allowances.

Maternity allowances are paid to provide financial assistance towards the expenses associated with the birth of children and are additional to the benefits provided under the Commonwealth hospital benefits scheme. They are not subject to a means test.

The allowance is £15 if the mother has no other children, £16 if she has one or two other children and £17 10s. if she has three or more other children under the age of sixteen years. The amount is increased by £5 in respect of each additional child born at a birth. An advance payment of £10 on account of a maternity allowance may be made four weeks before the expected date of birth. The balance is payable immediately after the birth. Payment may be made in respect of the birth of a still-born child, or a child which lives for less than twelve hours, if the period of intra-uterine life of the child was at least 5½ months.

A maternity allowance is payable to a woman who, at the date of giving birth to a child, is residing in Australia, is temporarily abroad or who is on board a ship proceeding from a port in Australia or an Australian Territory to another port in Australia, or another Australian Territory, or on board a ship proceeding to Australia, provided she receives no maternity benefit in respect of the birth from the country whence she came. An alien mother may receive the allowance if she was a British subject prior to her marriage, or if she or her husband resided in Australia for at least twelve months immediately prior to the birth of the child, but this last condition may be waived if the mother is likely to remain in Australia. The allowances may be paid to aboriginal natives of Australia who have been granted exemption from State control laws or who, in any State where exemption is not provided for, are considered suitable persons to receive the allowance by reason of their character, standard of intelligence and social development.

The following table gives details of the amount paid in each State for the years 1953-54 to 1957-58:—

MATERNITY ALLOWANCES: AMOUNT PAID IN EACH STATE.  
(£'000.)

Year ended 30th June—	N.S.W.	Vic.	Q'land.	S.Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Over- seas.	Total.
1954 .. .. .	a 1,173	874	497	(b) 301	254	125	(c)	(d)	2	3,226
1955 .. .. .	1,250	892	513	297	261	128	7	13	1	3,362
1956 .. .. .	1,207	935	526	304	276	137	8	15	2	3,410
1957 .. .. .	1,252	949	532	319	271	131	9	17	2	3,482
1958 .. .. .	1,281	969	547	323	271	138	11	18	2	3,560

(a) Includes Australian Capital Territory with South Australia.

(b) Includes Northern Territory.

(c) Included

(d) Included with New South Wales.

The following table shows the number of maternity allowance claims paid in each State or Territory during the years 1953-54 to 1957-58:—

**MATERNITY ALLOWANCES: CLAIMS PAID IN EACH STATE.**

Year ended 30th June—	N.S.W.	Vic.	Q'land.	S.Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Over-seas.	Total.
1954 .. .. .	<i>a</i> 72,380	54,219	30,889	<i>b</i> 18,749	15,803	7,726	(c)	(d)	48	199,814
1955 .. .. .	76,614	55,720	31,782	18,506	16,261	7,940	481	787	88	208,179
1956 .. .. .	75,591	58,385	32,764	19,036	17,180	8,328	510	961	110	212,865
1957 .. .. .	77,387	59,648	32,882	19,929	16,853	8,166	579	1,067	106	216,617
1958 .. .. .	79,220	60,666	34,000	20,001	16,829	8,509	666	1,137	121	221,149

(a) Includes Australian Capital Territory. (b) Includes Northern Territory. (c) Included with South Australia. (d) Included with New South Wales.

The following table shows the number of claims paid in each State at the several rates of maternity allowances during the year 1956-57:—

**MATERNITY ALLOWANCES: CLAIMS PAID AT EACH RATE, 1957-58.**

State or Territory.	Single Births.			Multiple Births.						Total Claims Paid.
	£15.	£16.	£17 10s.	Twins.			Triplets.			
				£20.	£21.	£22 10s.	£25.	£26.	£27 10s.	
New South Wales .. .. .	25,699	37,382	15,206	235	440	246	2	7	3	79,220
Victoria .. .. .	19,741	28,588	11,572	186	374	195	1	3	6	60,666
Queensland .. .. .	9,765	15,738	8,128	70	171	121	..	3	4	34,000
South Australia .. .. .	6,103	9,528	4,118	67	117	64	..	2	2	20,001
Western Australia .. .. .	4,704	8,249	3,665	53	99	57	2	..	..	16,829
Tasmania .. .. .	2,421	3,862	2,124	12	53	37	..	..	..	8,509
Northern Territory .. .. .	219	303	138	2	1	3	..	..	..	666
Australian Capital Territory .. .. .	356	557	211	3	7	2	..	..	1	1,137
Overseas .. .. .	47	53	19	1	1	..	..	..	..	121
<b>Total .. .. .</b>	<b>69,055</b>	<b>104,260</b>	<b>45,181</b>	<b>629</b>	<b>1,263</b>	<b>725</b>	<b>5</b>	<b>15</b>	<b>16</b>	<b>221,149</b>

**§ 8. Unemployment, Sickness and Special Benefits.**

Unemployment and Sickness benefits are paid to men over 16 and under 65 years of age, and women over 16 and under 60 years of age who, through unemployment, sickness or accident, suffer temporary loss of regular earnings. They must have been living in Australia during the preceding twelve months or be likely to remain permanently in Australia. A person in receipt of an age, invalid or widow's pension, or a service pension (as distinct from a war pension) under the Repatriation Act, or a tuberculosis allowance is ineligible to receive a benefit.

To qualify for an unemployment benefit, a person must establish that he is unemployed and that his unemployment is not due to his being a direct participant in a strike, that he is capable and willing to undertake suitable work, and that he has taken reasonable steps to obtain such work. Registration with the local Commonwealth District Employment Officer is necessary.

To qualify for a sickness benefit, a person must establish that he is temporarily incapacitated for work by reason of sickness or accident and that he has thereby suffered a loss of salary, wages or other income.

A married woman is not eligible to receive a sickness benefit if it is reasonably possible for her husband to maintain her. Where her husband is able to maintain her only partially, a benefit may be paid at such rate as is considered reasonable in the circumstances. In exceptional cases, a married woman may qualify for an unemployment benefit in her own right.

A benefit may be paid to those aboriginal natives of Australia who are considered suitable by reason of character, standard of intelligence and social development.

The maximum weekly rates of benefit payable and permissible income since the 17th October, 1957, have been as follows:—

Age and Marital Status of Claimant.	Maximum Weekly Benefit Payable.	Permissible Weekly Income.
	£ s. d.	£ s. d.
Unmarried person under 18 years of age .. .. .	1 15 0	1 0 0
Unmarried person 18–20 years of age .. .. .	2 7 6	1 0 0
All others .. .. .	3 5 0	2 0 0

An additional benefit of £2 7s. 6d. a week may be paid for a dependent spouse and 10s. for one dependent child under 16 years of age. If no allowance is paid for a dependent spouse, a similar benefit may be paid for a claimant's housekeeper, provided there are one or more children under 16 years of age in the home and the woman is substantially dependent on the claimant but is not employed by him.

The weekly rate of benefit is reduced by the amount by which a beneficiary's income from sources other than his pension exceeds the amount shown in the final column of the relevant line in the above table. For unemployment benefit purposes, the incomes of the claimant and his spouse are taken into account, unless they are permanently separated. For sickness benefit purposes, the income of the claimant only is taken into account, while up to £2 a week is disregarded of any payment received from an approved friendly society or other similar approved body in respect of the incapacity for which sickness benefit is payable. "Income" does not include child endowment, or other payments in respect of children, the Commonwealth hospital benefits and pharmaceutical benefits, or a tuberculosis allowance or an amount paid in reimbursement of medical, dental or similar expenses paid. There is no means test on property.

Where a person qualified for sickness benefit receives or is entitled to receive (in respect of the same period and the same incapacity for which sickness benefit is payable) any payment by way of compensation (including workers' compensation), damages, or otherwise under any law (except payments for which he has contributed), the amount of the compensation, etc., is not taken into account as income but is deducted from the weekly rate of sickness benefit otherwise payable.

There is a waiting period of seven days in respect of which unemployment or sickness benefit is not payable. Unemployment and sickness beneficiaries are eligible to participate in the Commonwealth Rehabilitation Service under the same conditions as invalid pensioners. Payment of an unemployment or sickness benefit may be refused if the claimant or beneficiary, on being required, fails to undergo a medical examination or to receive treatment or undertake training or to do any suitable work.

A special benefit may be granted to a person not qualified for unemployment or sickness benefit who is not in receipt of an age, invalid or widow's pension or a service pension, if by reason of age, physical or mental disability or domestic circumstances, or for any other reason, he is unable to earn a sufficient livelihood for himself and his dependants. Special benefits are also paid to migrants who are in reception centres and are awaiting their first placement in employment in Australia. During this time, they receive a short instruction in English and the Australian way of life to facilitate their assimilation into the community and employment.

During the year 1957–58, special benefits were granted to 14,016 migrants at a cost of £159,300.

The following table shows the number admitted to benefit during 1957–58, the number of persons on benefit at 30th June, 1958, and the amount paid for each benefit during 1957–58.

## UNEMPLOYMENT, SICKNESS AND SPECIAL BENEFITS, 1957-58.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
<i>Persons Admitted to Benefit—</i>									
<b>Unemployment—</b>									
Males .. .. .	40,775	20,386	34,503	8,418	12,062	2,912	120	235	119,411
Females .. .. .	9,411	5,992	4,728	2,055	1,620	573	7	80	24,466
Persons .. .. .	50,186	26,378	39,231	10,473	13,682	3,485	127	315	143,877
<b>Sickness—</b>									
Males .. .. .	16,063	9,325	7,756	3,864	3,477	1,506	52	108	42,151
Females .. .. .	5,295	3,160	1,956	873	722	319	11	30	12,366
Persons .. .. .	21,358	12,485	9,712	4,737	4,199	1,825	63	138	54,517
<b>Special—(a)</b>									
Males .. .. .	775	330	694	217	67	57	1	10	2,151
Females .. .. .	555	739	198	104	61	46	..	16	1,719
Persons .. .. .	1,330	1,069	892	321	128	103	1	26	3,870
<b>Total—(a)</b>									
Males .. .. .	57,613	30,041	42,953	12,499	15,606	4,475	173	353	163,713
Females .. .. .	15,261	9,891	6,882	3,032	2,403	938	18	126	38,551
Persons .. .. .	72,874	39,932	49,835	15,531	18,009	5,413	191	479	202,264
<i>Persons on benefit at end of year—</i>									
<b>Unemployment—</b>									
Males .. .. .	8,695	4,712	3,913	1,586	2,601	525	8	11	22,051
Females .. .. .	2,974	2,187	992	672	404	114	1	23	7,367
Persons .. .. .	11,669	6,899	4,905	2,258	3,005	639	9	34	29,418
<b>Sickness—</b>									
Males .. .. .	2,448	1,336	1,022	519	464	205	6	15	6,015
Females .. .. .	872	525	303	126	110	42	..	8	1,986
Persons .. .. .	3,320	1,861	1,325	645	574	247	6	23	8,001
<b>Special—(a)</b>									
Males .. .. .	259	94	104	59	31	20	..	1	568
Females .. .. .	506	499	300	110	74	89	..	3	1,581
Persons .. .. .	765	593	404	169	105	109	..	4	2,149
<b>Total—(a)</b>									
Males .. .. .	11,402	6,142	5,039	2,164	3,096	750	14	27	28,634
Females .. .. .	4,352	3,211	1,595	908	588	245	1	34	10,934
Persons .. .. .	15,754	9,353	6,634	3,072	3,684	995	15	61	39,568
<b>Benefits Paid—</b>									
<b>Unemployment</b>	£ 1,726,525	1,011,801	1,281,756	305,549	482,735	103,820	1,976	5,613	4,919,775
<b>Sickness</b> .. .. .	£ 792,335	406,032	304,761	157,379	130,959	58,744	1,821	5,232	1,857,263
<b>Special (b)</b> .. .. .	£ 161,818	221,733	97,213	36,999	18,696	16,410	35	802	553,706
<b>Total Benefits Paid b £</b>	2,680,678	1,639,566	1,683,730	499,927	632,390	178,974	3,832	11,647	7,330,744

(a) Excludes migrants in reception and training centres.

(b) Includes payments to migrants in reception and training centres.

The following table shows the number of persons who were admitted to benefit, the average number receiving benefit at the end of each week and the amount paid for each benefit for Australia during each of the years 1953-54 to 1957-58.

## UNEMPLOYMENT, SICKNESS AND SPECIAL BENEFITS: SUMMARY, AUSTRALIA.

Year.	Number Admitted to Benefits.			Average Number of Persons on Benefit at end of each week.			Amount Paid in Benefits.		
	Un-employment.	Sick-ness.	Special. (a)	Un-employment.	Sick-ness.	Special. (a)	Un-employment.	Sick-ness.	Special. (b)
1953-54 .. .. .	62,133	56,536	3,631	13,812	7,967	1,859	£ 2,505,463	£ 1,675,593	£ 362,398
1954-55 .. .. .	24,300	57,766	3,548	3,871	7,967	1,966	679,438	1,607,842	352,587
1955-56 .. .. .	37,384	55,985	3,679	3,948	7,303	1,984	671,820	1,519,073	372,220
1956-57 .. .. .	96,030	52,791	3,877	12,452	7,006	2,015	2,096,036	1,498,526	404,865
1957-58 .. .. .	143,877	54,517	3,870	23,847	7,262	2,106	4,919,775	1,857,263	553,706

(a) Excludes migrants in reception and training centres.

(b) Includes payments to migrants in reception and training centres.

(c) Does not include special variations of advances for payments in regional areas, made at the end of the year.

### § 9. Widows' Pensions.

Widows' pensions are payable to the following classes of women. The rates shown have been in operation since 15th October, 1957.

Class "A"—A widow who has the custody, care and control of one or more children under the age of 16 years—£240 10s. per annum (£4 12s. 6d. a week) plus £26 per annum (10s. a week) for each child after the first in her custody, care and control.

Class "B"—A widow who has no children under 16 years of age in her custody, care and control, and who is not less than 50 years of age or who, after having attained the age of 45 years, ceased to receive a Class "A" widow's pension by reason of the fact that she no longer had the custody, care and control of a child—£195 per annum (£3 15s. a week).

Class "C"—A widow who is under 50 years of age and has no children under the age of 16 years in her custody, care and control, but is in necessitous circumstances at the time of or within 26 weeks after the death of her husband—£3 15s. a week for not more than 26 weeks. If at the time of her husband's death the widow is with child, this period will be extended until the birth of the child. She will then become eligible for a class "A" widow's pension.

Class "D"—A woman whose husband has been serving a term of imprisonment for at least six months, if she has the custody, care and control of one or more children under the age of 16 years or is not less than 50 years of age—£195 per annum (£3 15s. a week).

The term "widow" includes:—(i) a woman who was wholly or mainly maintained by a man as his wife on a permanent and bona fide domestic basis for not less than the three years before his death; (ii) a woman who has been deserted by her husband without just cause for not less than six months; (iii) a divorcee who has not remarried; (iv) a woman whose husband is an inmate of a mental hospital; and (v) a woman whose husband is in prison for at least six months.

The residential qualification is five years' continuous residence in Australia immediately prior to the date of judgment of the claim, but this period may be reduced to one year under certain circumstances.

A widow's pension is not payable to an alien, unless she was a British subject before her marriage, a woman who is in receipt of an age or invalid pension, a tuberculosis allowance, or a war widow's pension, a woman who has deprived herself of property or income in order to qualify for a pension, a deserted wife or a divorcee who has not taken reasonable action to obtain maintenance from her husband or former husband, a woman who is not of good character, or a woman who is not deserving of a pension. Widows' pensions may be granted to aboriginal native women of Australia under the same conditions as age pensions.

Widows' pensions are subject to a means test. They are reduced by the amount by which a pensioner's income from sources other than her pension exceeds £182 per annum (£3 10s. a week). In determining the amount of income, the income of a Class "A" widow is reduced by £26 per annum (10s. a week) less the amount of any payment other than child endowment received by her in respect of her child.

The pension of a woman in Class "B" or "D" is further reduced by £1 per annum for every complete £12 by which the value of her property exceeds £200.

No pension is payable to a woman who owns property valued at more than £1,750. The types of income and property disregarded in the case of widows' pensions are the same as in the case of age and invalid pensions except that any amount in excess of 15s. a week received by a deserted wife, or a divorcee from her husband or former husband, for the maintenance of a child is taken into account in the claimant's income.

The pension payable to a Class "A" widow may be continued after her child reaches 16 years and until the age of 18 years is reached if the child continues with full-time education at a school or university, is still dependent on the widow and is not in employment.

The number of widows' pensions by class, current at 30th June, 1958, was as follows:—Class "A", 20,970; Class "B", 25,579; Class "C", 138; Class "D", 241; total, 46,928.

The amount paid in pensions during 1957-58 was £9,832,095. The following table shows details of widows' pensions paid in each State and Territory in the year 1957-58:—

WIDOWS' PENSIONS AT 30th JUNE, 1958.

State or Territory.	Pensions Current.			Average Fort-nightly Pension.	Amount paid in Pensions during 1957-58.	
	Class "A".	All Classes.	Total per 10,000 of Population.		Amount.	Per head of Population.
				£ s. d.	£	£ s. d.
New South Wales .. ..	8,106	18,593	50	8 10 4	3,900,954	1 1 5
Victoria .. ..	4,931	11,252	41	8 6 3	2,331,171	0 17 3
Queensland .. ..	3,882	7,784	55	8 12 1	1,676,067	1 3 11
South Australia .. ..	1,809	4,066	45	8 7 11	843,390	0 19 0
Western Australia .. ..	1,365	3,542	50	8 2 7	707,480	1 0 3
Tasmania .. ..	817	1,581	47	8 12 6	338,494	1 0 3
Northern Territory .. ..	17	31	16	9 4 1	6,598	0 6 11
Australian Capital Territory .. ..	43	79	19	8 11 9	19,328	0 9 10
Overseas .. ..	(a)	(a)	..	(a)	8,613	..
<b>Total .. ..</b>	<b>20,970</b>	<b>46,928</b>	<b>48</b>	<b>8 9 0</b>	<b>9,832,095</b>	<b>1 0 2</b>

(a) Included in figures for State in which pensioner is permanently domiciled.

### § 10. Reciprocal Agreements with Other Countries.

1. *New Zealand.*—An agreement between the governments of Australia and New Zealand for reciprocity in social services came into operation on 1st July, 1949.

The reciprocal arrangements cover age and invalid pensions, widows' pensions, child endowment and unemployment and sickness benefits, and apply to both permanent and temporary changes of residence.

Residence in one country counts as residence in the other country in relation to entitlement to benefits in which a residential qualification applies.

Persons from one country taking up permanent residence in the other country become eligible for any of the specified benefits of the new country under the same conditions (with one or two exceptions) as apply to citizens of that country.

Persons in receipt of any of the specified benefits in one country may continue to receive those benefits while temporarily absent in the other country.

2. *United Kingdom.*—A new reciprocal agreement on social services between the United Kingdom and Australia came into operation on 1st April, 1958, replacing the original agreement which operated from 7th January, 1954.

Under this agreement, residence in one country now counts as residence in the other country as the basis for entitlement to benefits in which a residential qualification applies.

Australians going to the United Kingdom for permanent residence are treated in the United Kingdom as if they had been insured under the National Insurance Scheme while in Australia, so that they can qualify for various National Insurance benefits.

There is also provision for the safeguard of social service rights for persons going from one country to the other for temporary residence.

## B. OTHER SERVICES.

### § 1. Benevolent Homes.

1. *General.*—Numerous establishments exist for the housing and protection of persons no longer able to provide for themselves. These homes are supported by government and municipal aid, public subscriptions, bequests, etc. In many cases, relatives of poor and afflicted persons contribute to their maintenance.

An entirely satisfactory statistical tabulation of all forms of charitable aid provided by benevolent institutions is difficult because these services differ considerably.

2. **Principal Institutions.**—Particulars respecting the accommodation and the number of inmates of the principal institutions were published in earlier issues of the Official Year Book (see No. 22, p. 485).

3. **Revenue and Expenditure.**—Details regarding revenue and expenditure for the year 1956-57 are given in the following table.

**BENEVOLENT HOMES : REVENUE AND EXPENDITURE, 1956-57.**  
(£.)

Particulars.	N.S.W.(a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
<b>Revenue—</b>							
Government Aid ..	836,739	1,180,656	441,038	114,685	183,302	271,937	3,028,357
Municipal Aid ..	..	1,113	..	..	..	..	1,113
Public Subscriptions, Legacies ..	..	43,429	30,991	..	751	..	..
Fees (b) ..	293,453	525,670	186,789	31,264	184,637	42,817	1,405,923
Other ..	..	14,822	44,969	3,949	2,244	138	..
<b>Total</b> ..	<b>1,130,192</b>	<b>1,765,690</b>	<b>703,787</b>	<b>149,898</b>	<b>370,934</b>	<b>314,892</b>	<b>4,435,393</b>
<b>Expenditure—</b>							
Salaries and Wages	522,226	775,732	335,596	89,491	243,066	200,026	2,166,137
Upkeep and Repair of Buildings ..	73,263	53,510	12,713	20,505	8,301	8,022	176,314
All Other ..	359,312	347,199	329,820	35,742	100,636	106,580	1,279,289
Capital (c) ..	175,391	604,798	21,253	4,160	18,931	..	824,533
<b>Total</b> ..	<b>1,130,192</b>	<b>1,781,239</b>	<b>699,382</b>	<b>149,898</b>	<b>370,934</b>	<b>314,628</b>	<b>4,446,273</b>

(a) These figures relate to the three State hospitals and homes only. (b) Includes Commonwealth hospital benefits and age and invalid pension receipts. (c) Includes such items as purchase of land, cost of new buildings and additions to buildings.

4. **The Aged Persons Homes Act.**—The Aged Persons Homes Act which operated from 16th December, 1954, was amended in October, 1957. The purpose of the Act is to encourage the provision of homes at which aged persons may reside in conditions approaching normal domestic life as nearly as possible.

To be eligible for assistance under this Act an organization must be—

- (a) carried on otherwise than for purposes of profit or gain to the individual members ; and
- (b) a religious organization, an organization the principal objects or purposes of which are charitable or benevolent, an organization of former members of the defence forces established in every State or a State branch of such an organization, or an organization approved by the Governor-General for the purpose of this Act.

An organization conducted or controlled by, or by persons appointed by, the Government of the Commonwealth or of a State or a local governing body established under the law of a State, is not eligible for assistance under this Act.

The Director-General of Social Services may make a grant of money to an organization as assistance towards meeting the cost of the construction or purchase of a home, including land, to be used permanently for the accommodation of aged persons. The grant is made on a £2 for £1 basis with money raised by the organization, not counting money which the organization received from a governmental body or borrowed. Before a grant is made, the Director-General must be satisfied that the sum of the money expended, and the money presently available for expenditure, by the organization towards the capital cost of the home, together with the amount of the grant, will be not less than the capital cost of the home. Expenditure by the Commonwealth Government was £436,236 in 1954-55, £397,994 in 1955-56, £751,136 in 1956-57, and £1,148,042 in 1957-58.

## § 2. Orphanages, Industrial Schools, etc.

1. **General.**—The methods of caring for orphans and neglected children differ extensively, some are placed in orphanages and industrial schools, while others are boarded out with their mothers or female relatives or with approved foster-mothers. The children in orphanages and similar institutions may receive, in addition to primary education, some craft training. In all cases, employment is found for the children on their discharge from the institution, and they remain for some time under the supervision of the proper authorities. The conditions under which orphans, neglected children and children boarded out live are subject to frequent departmental inspections.

2. **Principal Institutions.**—Particulars concerning the principal institutions in each State were published in earlier issues of the Official Year Book (see No. 22, p. 486).

3. **Children under Government Authority.**—The following table summarizes the transactions of State Departments during 1956-57 in connexion with children under their control or supervision. In addition to neglected children, the figures include uncontrollable and convicted children who are wards of a government authority, as well as poor children whose parents obtain assistance from the government without giving up the legal right of custody.

CHILDREN UNDER GOVERNMENT AUTHORITY : SUMMARY, 1956-57.

Particulars.	N.S.W.	Vic.(a)	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>A. Children maintained or subsidized by the State.</b>							
In State shelters, industrial schools, reformatories, etc.(b) .. ..	1,015	440	335	277	64	19	2,150
In licensed or approved institutions .. ..	706	1,755	836	62	394	247	4,000
<b>Boarded out—</b>							
With own mothers ..	6,363	3,659	3,672	21	} 2,112	125	25,035
With licensed foster-mothers, guardians, relatives and friends ..	2,059	492	592	5,940			
<b>Total children maintained or subsidized by the State</b>	<b>10,143</b>	<b>6,346</b>	<b>5,435</b>	<b>6,300</b>	<b>2,570</b>	<b>391</b>	<b>31,185</b>
<b>B. Children not maintained or subsidized by the State.</b>							
In licensed or approved institutions .. ..	(c) 1,711	..	..	76	617	..	2,404
Boarded out .. ..	251	594	..	2,070	357	..	3,272
On probation (from Institutions or Children's Courts) .. ..	3,682	..	211	407	816	..	5,116
In service or apprenticed .. ..	37	235	181	226	78	..	757
Adopted or otherwise placed .. ..	420	35	..	413	41	..	909
<b>Total children not maintained or subsidized by the State</b>	<b>6,101</b>	<b>864</b>	<b>392</b>	<b>3,192</b>	<b>1,909</b>	<b>..</b>	<b>12,458</b>
<b>Total children under State control or supervision ..</b>	<b>16,244</b>	<b>7,210</b>	<b>5,827</b>	<b>9,492</b>	<b>4,479</b>	<b>391</b>	<b>43,643</b>
	£	£	£	£	£	£	£
<b>Gross cost of children's relief</b>	1,243,568	807,609	476,222	247,009	134,106	44,647	2,953,161
<b>Receipts from parents' contributions, etc. ..</b>	77,179	39,626	28,876	39,748	15,967	5,211	206,607
<b>Net Cost to State ..</b>	<b>1,166,389</b>	<b>767,983</b>	<b>447,346</b>	<b>207,261</b>	<b>118,139</b>	<b>39,436</b>	<b>2,746,554</b>

(a) Year ended 31st December, 1957.  
after-care ex-institution inmates.

(b) Includes inmates of hospitals.

(c) Includes 659

The total expenditure on children's relief in the foregoing table shows considerable variation amongst the States owing to the different methods of treating assistance to mothers with dependent children. In South Australia, Western Australia and Tasmania, large amounts have been excluded from the total expenditure on this account owing to the difficulty of obtaining separate particulars for allowances made in respect of the dependent children only.

### § 3. Protection of Aborigines.

For the protection of the aboriginal Australian race, there are institutions, under the supervision of Aborigines Boards, where these people are housed and encouraged to work, the children receiving elementary education. The work is usually carried on at mission stations, but many of the natives are nomadic, and receive food and clothing when they call, while others only rarely come near the stations. The aboriginal race is extinct in Tasmania. The expenditure from Consolidated Revenue in 1957-58 was as follows (figures in brackets are for the year 1956-57):—New South Wales, £205,028 (£181,585); Victoria, £24,999 (£16,219); Queensland, £672,798 (£657,917); South Australia, £262,657 (£214,809); Western Australia, £528,766 (£447,993); Northern Territory, £684,308 (£508,743); Australian Capital Territory, £4,166 (£4,684); Australia, £2,382,722 (£2,031,950).

### § 4. Lifesaving.

There are three lifesaving societies in Australia—The Royal Life Saving Society, the Australian Life Saving Society and the Surf Life Saving Association. The object of these societies is the saving of life from drowning and other forms of asphyxiation. Among other things, they aim to encourage an ability to swim and a knowledge of lifesaving techniques on the part of pupils in schools and colleges. Numerous certificates of proficiency in various grades are issued annually throughout Australia.

### § 5. Royal Humane Society.

The Royal Humane Society of Australasia, with head office at 188 Collins Street, Melbourne, has as its main object the granting of awards to all who with bravery, skill and perseverance promptly risk their own lives in saving or attempting to save those of their fellow creatures. The classes of awards are (a) Gold Medal; (b) Silver Medal; (c) Bronze Medal; and (d) Certificate of Merit. The Clarke Medal is awarded for the outstanding case of the year, and the Rupert Wilks Trophy is awarded for the most outstanding bravery by a child under 13 years of age. About 50 awards are made annually.

### § 6. The Order of St. John.

The Priory in Australia of the Most Venerable Order of the Hospital of St. John of Jerusalem is the governing body of the various activities of the Order which comprises the St. John Ambulance Association, the St. John Ambulance Brigade and the Hospitaliers' Clubs in all States and Commonwealth Territories.

Members of the St. John Ambulance Association teach first aid to the injured, home nursing, hygiene and child welfare.

Members of the St. John Ambulance Brigade provide first aid at public functions.

The Hospitaliers' Clubs in each State undertake the collection of funds for the St. John Ophthalmic Hospital in Jerusalem, and other duties which tend to bring together all persons interested in the work of the order.

The Order of St. John has established ambulance transport services in some States, acts as an ancillary to such services in other States, and provides technical reserves for the medical services of the Crown.

The Lifesaving Medal is awarded by the Order as warranted.

## § 7. Other Charitable Institutions.

Owing to the variety of names and functions of other charitable institutions it has been found impracticable to give detailed particulars. The aid given in kind—food, clothing, tools of trade, etc.—is considerable, whilst the shelter and treatment afforded range from a bed for a night for casual callers in establishments ministering minor charity to indoor treatment over long periods in those that exist for the relief of the aged and the infirm. The institutions not particularized include homes for the deaf, dumb and blind, infant homes, homes for the destitute and aged poor, industrial colonies, night shelters, crèches, rescue homes for females, free kindergartens, auxiliary medical charities, free dispensaries, benevolent societies and nursing systems, ambulance and health societies, boys' brigades, humane and animals' protection societies, prisoners' aid associations, shipwreck relief societies, bush fire, flood and mining accident relief funds.

## CHAPTER XIX.

## LOCAL GOVERNMENT.

## § 1. Introduction.

1. **Local Government Authorities.**—In each State of the Commonwealth, there exists a system of local government whose powers and responsibilities are in general similar and cover such matters as the construction and maintenance of roads, streets and bridges, water, sewerage and drainage systems, and health and sanitary services, the supervision of building, and the administration of regulations relating to items such as weights and measures, slaughtering, the registration of dogs, etc. In addition to these obligatory functions, there are also many which may be performed by a local government authority either with or without the consent of the ratepayers or the Governor-in-Council. These include transport facilities, electricity, gas, and other business undertakings, hospitals, charitable institutions, recreation grounds, parks, baths, libraries, museums, etc.

The system is based on the principle of a grant of specific powers by the State legislatures to the local authorities, their autonomy, however, being more or less limited by the provision for general supervision by a department of the central government or by the Governor-in-Council. Otherwise, within the scope of the Acts under which they are constituted or which they have to administer, they are responsible only to the ratepayers.

While the broad pattern of local government throughout the States of Australia is similar, the range of activities, election of officers, methods of valuation and rating powers, etc., differ considerably.

The areas over which local government bodies exercise general control, numbering 912, are known in New South Wales as cities, municipalities and shires; in Victoria as cities, towns, boroughs and shires; in Queensland as cities, towns and shires; in South Australia as cities, corporate towns and district council areas; in Western Australia as cities, municipalities and road districts; and in Tasmania as cities and municipalities. In New South Wales, some local government authorities in an area have combined to provide services such as electricity, water, sewerage and drainage—e.g., the county councils. Within shires, there are also some municipal units known as urban areas. Apart from the more thinly populated parts of New South Wales and South Australia, and the Commonwealth Territories, practically the whole of Australia comes within local government jurisdiction.

The financial statistics in § 2 following are classified under the headings of Ordinary Services and Business Undertakings. The former covers the obligatory and general functions referred to above. Business Undertakings include public utilities such as water supply, sewerage, electricity, gas, transport and hydraulic power undertakings, and other miscellaneous works such as abattoirs, quarries, ice works, cinemas, etc.

2. **Semi-Governmental Authorities.**—In addition to local government authorities, a large number of authorities have been set up to control specific activities, which are often identical with some of those performed by either, or both, of the other classes of public authority—*central government and local government*—and a complete picture of any field of activity for a State or Australia as a whole cannot be obtained without reference to each class operating in that particular field. These semi-governmental authorities differ primarily from local government authorities in that their operations are restricted to the specific activity for which they were constituted—e.g., roads and bridges, or water and sewerage, or electricity and irrigation, or harbours, or tramways, etc.—i.e. each dispenses a specific service throughout an area as distinct from the general services of the local authority.

In §§ 3 to 7, which deal with debt, roads and bridges, water supply and sewerage, harbours, and fire brigades, particulars are included of the more important of these authorities which operate within the range covered by this chapter.

3. **Roads, Bridges, etc.**—The construction and maintenance of roads, bridges and ferries are generally part of the functions of local authorities, but in each State there exists a central road authority or a government department whose duties relate to the construction, reconstruction and maintenance of “main” and “developmental” roads, the distribution of funds to local bodies, and the supervision and co-ordination of road construction and policy throughout the State. Although roads and bridges constructed and maintained directly by the government or by the central road authority do not properly come under the heading of “Local Government”, they have been included in this chapter for the

sake of convenience. Owing to difficulty in obtaining complete particulars of receipts and expenditure by the various local governing bodies in respect of roads under their control, the details of receipts and expenditure given in § 4 are those of central governments only, relating either to the supervisory board or commission in the State or to direct activities of a department. In § 2, some information is given of the revenue and expenditure of local government authorities in respect of roads.

**4. Water Supply and Sewerage.**—In the cities of Sydney and Melbourne, the control of water supply and sewerage is in the hands of special boards, while in Adelaide and Perth these services are under the direct supervision of government departments. In most of the other cities and towns, the municipal councils, or, in some cases, water trusts, are the controlling bodies which either construct the works out of their own resources or take them over after they have been constructed by the government.

**5. Harbours.**—The majority of the harbours in Australia are managed by boards, the members of which are either elected by persons interested, or are appointed by the government. In some instances, however, they are directly controlled by the government.

**6. Fire Brigades.**—In all the States, the management of fire brigades is undertaken by boards. These boards usually comprise members elected by the councils of municipalities and insurance companies within the districts placed under their jurisdiction, and one or more members appointed by the government. Occasionally volunteer or country fire brigades are represented.

**7. Other Local or Semi-Governmental Activity.**—The activities referred to above are not the only forms of local or semi-governmental undertakings. There are others, the most important being tramways and omnibus services, and electricity and gas undertakings, which are not dealt with in this chapter, except to the extent that they are represented in the finances as shown in the following section. Chapter XIV., Transport and Communication, contains information on municipal transport services, and Chapter VII., Electric Power Generation and Distribution, deals with the various types of electricity undertakings in each State. In addition, particulars of municipal electricity and gas undertakings, although not shown separately, are included in the relevant sections in Chapter VI., Manufacturing Industry.

## § 2. Local Government Authorities.

**1. New South Wales.**—For purposes of local government, the whole of the Eastern and Central land divisions and a small portion of the sparsely populated Western division have been divided into cities, municipalities (most principal towns) and shires (mainly large rural areas, some of which embrace important towns). At the end of 1954, the area incorporated was 184,000 square miles, or nearly three-fifths of the total area of the State.

All local government authorities in the State are subject to the general provisions of the Local Government Act.

Municipalities and shires may combine to form county councils for the establishment and conduct of services of joint benefit, e.g., electricity, water, sewerage. There were 38 county councils and the Grafton and South Grafton Water Board at 31st December, 1956.

**2. Victoria.**—Local government is established throughout the State, the various divisions being termed cities, towns, boroughs or shires. The only unincorporated areas are French Island (42,000 acres) in Westernport Bay, Julia Percy Island (650 acres), off Port Fairy, and Tower Hill (1,460 acres), adjacent to the Borough of Kororoit. Melbourne and Geelong were incorporated under special statutes prior to the establishment of a general system of local government, but are now subject to several provisions of the Local Government Act.

**3. Queensland.**—The whole of the State (except certain islands along the coast, the Dawson Valley Irrigation Area and the Somerset Dam Area) is incorporated into cities, towns and shires under the Local Authorities Act 1902 and its amendments.

**4. South Australia.**—The settled portion of South Australia is incorporated, being mostly under municipal corporations in the larger cities and towns, and district councils in the agricultural areas.

**5. Western Australia.**—In this State, local government is carried on by means of municipalities and district road boards, the whole of the State being so incorporated.

**6. Tasmania.**—The whole State is divided into municipal districts, Hobart and Launceston being incorporated as cities under separate Acts.

7. Area, Population, Dwellings and Value of Ratable Property.—The area, population, dwellings and value of ratable property in the incorporated areas of each State are shown in the following table. The valuations relate to ratable property only and exclude Government and other non-ratable property, whose value in the aggregate is considerable. In this table, particulars of dwellings are in accordance with the definition used in the 1954 Census, and are compiled from information collected on the Census Schedules. For the purpose of the Census, a dwelling was defined as any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building. The term has, therefore, a very wide meaning and includes, in addition to houses and flats, a great variety of dwellings ranging from a single-roomed shack to a multi-roomed hotel or institution. Unoccupied dwellings include "week-end" and holiday dwellings and other dwellings temporarily unoccupied on the night of the Census. Dwellings being built are not included.

**LOCAL GOVERNMENT AUTHORITIES : AREA, POPULATION, DWELLINGS AND VALUE OF RATABLE PROPERTY, 1955-56.**

Local Bodies.	Number	Area. '000 Acres.	Popula- tion. '000.	Dwellings.		Value of Ratable Property.		
				Occu- pied. No. (a)	Unoccu- pied. No. (a)	Unim- proved Capital Value. £'000.	Im- proved Capital Value. £'000.	Annual Value. £'000.
<b>NEW SOUTH WALES.(b)</b>								
Metropolitan— Capital City .. ..	1	7	188	52,763	1,099	107,567	311,158	18,318
Other .. ..	34	702	1,759	470,664	13,464	335,537	1,359,740	73,537
Outside Metropolitan Area	201	132,647	1,579	385,517	28,128	382,137	(c)	(c)
Total .. ..	236	133,356	3,526	908,944	42,691	825,241	(c)	(c)
<b>VICTORIA.(d)</b>								
Metropolitan— Capital City .. ..	1	8	91	22,348	455	(c)	175,313	8,766
Other .. ..	41	438	1,583	371,340	6,316	(c)	918,426	47,625
Outside Metropolitan Area	161	55,630	970	267,089	20,713	(c)	785,849	39,314
Total .. ..	203	56,076	2,644	660,777	27,484	(c)	1,879,588	95,705
<b>QUEENSLAND.(f)</b>								
Capital City .. ..	1	246	502	133,064	3,948	63,142	(c)	(c)
Outside Metropolitan Area	133	428,874	809	205,598	17,436	98,514	(c)	(c)
Total .. ..	134	429,120	1,311	338,662	21,384	161,656	(c)	(c)
<b>SOUTH AUSTRALIA.(g)</b>								
Metropolitan— Capital City .. ..	1	4	29	7,454	211	40,792	71,000	3,540
Other .. ..	20	99	485	126,649	2,737	(c)	227,000	11,366
Outside Metropolitan Area	122	34,531	319	78,505	5,399	(c)	232,000	11,611
Total .. ..	143	34,634	833	212,608	8,347	(c)	530,000	26,517
<b>WESTERN AUSTRALIA.(h)</b>								
Metropolitan— Capital City .. ..	1	14	100	25,460	577	1,190	(c)	4,506
Other .. ..	19	107	268	65,281	1,262	30,280	(c)	1,739
Outside Metropolitan Area	127	624,467	309	72,082	4,775	42,904	(c)	1,418
Total .. ..	147	624,588	677	162,823	6,614	74,374	(c)	7,663
<b>TASMANIA.(g)</b>								
Metropolitan— Capital City .. ..	1	18	55	14,624	375	8,197	25,601	1,783
Other .. ..	2	99	42	9,333	531	6,695	31,813	1,417
Outside Metropolitan Area	46	16,661	222	54,905	4,382	32,027	115,222	6,082
Total .. ..	49	16,778	319	78,862	5,288	46,919	172,636	9,282

(a) Particulars of dwellings are as at Census 30th June, 1954. (b) Year ended 31st December, 1955. (c) Not available. (d) Year ended 30th September, 1956. (e) Excludes Yallourn Works Area under the jurisdiction of the State Electricity Commission. (f) Year ended 30th June, 1954. (g) Year ended 30th June, 1956. (h) Municipalities—Year ended 31st October, 1956; Road Districts—Year ended 30th June, 1956.

8. Finances.—(i) *General.* The following tables show the latest available financial statistics for local government authorities. The figures relate to the year 1955-56, except for New South Wales, where they relate to the year 1955 and for Queensland, where they relate to the year 1953-54.

(ii) *Ordinary Services.* In the returns of revenue and expenditure for 1955-56 in the following table, the proceeds from loans and expenditure thereof have been excluded. The financial operations of business undertakings controlled by the various local government authorities are given in the next paragraph. The profits resulting from the working of these undertakings, where taken into general revenue, have been included.

**LOCAL GOVERNMENT AUTHORITIES : ORDINARY SERVICES—REVENUE AND EXPENDITURE, 1955-56.**

Particulars.	N.S.W. (a)	Vic. (b)	Q'land. (c)	S. Aust. (d)	W. Aust. (e)	Tas. (d)	Total.
Number of Local Government Authorities .. ..	236	203	134	143	147	49	912
REVENUE (EXCLUDING LOAN RECEIPTS). (£'000.)							
<i>Taxation—</i>							
Rates (net) ..	23,894	15,325	8,961	4,081	2,650	1,575	56,666
Penalties ..	135	44					
Licences ..	492	92	75	52	54	15	780
<i>Total</i> ..	24,521	15,461	9,036	4,133	2,704	1,591	57,446
<i>Public Works and Services—</i>							
Sanitary and Garbage Services	2,823	1,227	2,073	44	428	83	6,678
Council Properties	2,388	(f) 2,278	594	347	747	205	6,559
Street Construction ..	1,380	1,041	184	(g) 424	227	23	3,279
Other ..	1,758	288	64	200	53	43	2,406
<i>Total</i> ..	8,349	4,834	2,915	1,015	1,455	354	18,922
<i>Government Grants—</i>							
Roads ..	6,922	96	1,687	2,138	1,066	238	12,147
Other ..	1,343	595	(h) 1,326	52	1,092	30	4,438
<i>Total</i> ..	8,265	691	3,013	2,190	2,158	268	16,585
Profits from Business Undertakings ..	..	293	1	..	32	..	326
Fees and Fines ..	..	91	..	91	14	..	147
All Other ..	..	254	419	136	196	..	1,348
<i>Total Revenue</i> ..	41,135	21,624	15,384	7,565	6,559	2,360	94,627
EXPENDITURE (EXCLUDING LOAN EXPENDITURE). (£'000.)							
<i>General Administration</i> ..	2,717	3,327	1,359	618	834	270	9,125
<i>Debt Services (excluding Business Undertakings)—</i>							
Interest ..	1,324	789	1,184	101	238	87	3,723
Redemption ..	2,890	1,029	1,752	473	468	146	6,758
Exchange ..	20	..	180	..	..	..	200
Other ..	..	24	18	..	..	..	42
<i>Total</i> ..	4,234	1,842	3,134	574	706	233	10,723
<i>Public Works and Services—</i>							
Roads, Streets and Bridges ..	20,099	7,720	5,143	5,004	2,176	1,064	41,206
Health Administration ..	768	899	225	104	188	51	2,235
Sanitary and Garbage Services	3,506	1,850	1,210	314	506	115	7,501
Street Lighting ..	953	423	220	150	88	65	1,899
Council Properties	5,163	(i) 4,255	1,484	693	1,975	320	13,890
Other ..	1,324	217	(j) 1,715	121	89	69	3,535
<i>Total</i> ..	31,813	15,364	9,997	6,386	5,022	1,684	70,266
<i>Grants—</i>							
Fire Brigades ..	229	321	156	86	77	37	906
Hospitals and Ambulances ..	156	107	2	147	8	..	2,541
Other Charities ..	(k) 755	(l) 1,046	3	3	13	1	..
Other ..	..	..	276	14	..	..	..
<i>Total</i> ..	1,140	1,474	437	250	98	48	3,447
All Other ..	1,034	208	193	..	144	217	1,796
<i>Total Expenditure</i> ..	40,938	22,215	15,120	7,828	6,804	2,452	95,357

(a) Figures for New South Wales relate to the year ended 31st December, 1955, and are on an income and expenditure basis as distinct from those of other States which are on a cash basis. (b) Year ended 30th September, 1956. (c) Year ended 30th June, 1954. (d) Year ended 30th June, 1956. (e) Municipalities—Year ended 31st October, 1956; Road Districts—Year ended 30th June, 1956. (f) Includes £940,000 plant hire. (g) Includes £65,000 reimbursement to Highways Department for work done. (h) Includes £927,000 for sewerage and drainage. (i) Includes £983,000 plant. (j) Includes £1,148,000 for sewerage, mosquito control and drainage. (k) To Main Roads Department. (l) To Country Roads Board.

The following table shows the revenue and expenditure (excluding loan) of local government authority ordinary services for the years 1938-39 and 1951-52 to 1955-56 :—

**LOCAL GOVERNMENT AUTHORITIES : ORDINARY SERVICES—REVENUE AND EXPENDITURE.**  
(£'000.)

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
<b>REVENUE (EXCLUDING LOAN RECEIPTS).</b>							
1939 ..	10,657	6,070	4,178	1,579	1,447	519	24,450
1952 ..	24,170	13,504	12,472	4,390	4,158	1,590	60,284
1953 ..	30,750	15,641	13,816	4,938	4,988	1,800	71,933
1954 ..	33,104	17,213	15,384	6,204	5,352	1,954	79,211
1955 ..	36,348	18,813	(d)	6,560	5,917	2,190	(d)
1956 ..	41,135	21,624	(d)	7,565	6,559	2,360	(d)
<b>EXPENDITURE (EXCLUDING LOAN EXPENDITURE).</b>							
1939 ..	10,790	6,193	4,335	1,558	1,489	507	24,872
1952 ..	24,167	14,040	12,615	4,452	4,271	1,605	61,150
1953 ..	29,605	15,457	13,151	5,032	4,793	1,781	69,819
1954 ..	31,880	16,912	15,120	5,859	5,115	1,944	76,830
1955 ..	35,003	18,914	(d)	6,935	5,950	2,240	(d)
1956 ..	40,938	22,215	(d)	7,828	6,804	2,452	(d)

(a) Years ended previous 31st December. (b) Years ended 30th September. (c) Municipalities—Years ended 31st October; Road Districts—Years ended 30th June. (d) Not available.

(iii) *Business Undertakings.* The table hereunder shows, for 1955-56, particulars of the revenue and expenditure, other than loan, of business undertakings under the control of local government authorities. These particulars are not included in the foregoing tables.

**LOCAL GOVERNMENT AUTHORITIES : BUSINESS UNDERTAKINGS—REVENUE AND EXPENDITURE, 1955-56.**  
(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>REVENUE (EXCLUDING LOAN RECEIPTS).</b>							
<i>Water Supply and Sewerage—</i>							
Rates .. .. .	2,002	..	51	..	10	564	2,627
Charges for Services and Sales of Products ..	517	118	2,194	2	2	113	2,946
Other (including Grants)	(a) 693	6	975	..	..	88	1,762
<i>Total .. .. .</i>	<i>3,212</i>	<i>124</i>	<i>3,220</i>	<i>2</i>	<i>12</i>	<i>765</i>	<i>7,335</i>
<i>Electricity and Gas—</i>							
Rates .. .. .	276	..	10	2	..	..	288
Charges for Services and Sales of Products ..	43,921	9,219	6,217	490	559	..	60,406
Other (including Grants)	1,266	141	324	58	6	..	1,795
<i>Total .. .. .</i>	<i>45,463</i>	<i>9,360</i>	<i>6,551</i>	<i>550</i>	<i>565</i>	<i>..</i>	<i>62,489</i>
<i>Railways, Tramways and Omnibuses—</i>							
Rates .. .. .	..	..	..	..	..	..	..
Charges for Services and Sales of Products ..	..	..	3,162	..	..	..	3,162
Other (including Grants)	..	..	114	..	..	..	114
<i>Total .. .. .</i>	<i>..</i>	<i>..</i>	<i>3,276</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>3,276</i>
<i>Other—</i>	(b)	(c)	(d)	(e)	(f)	(g)	
Rates .. .. .	4	..	..	..	1	..	5
Charges for Services and Sales of Products ..	2,628	496	45	40	50	66	3,325
Other (including Grants)	5	15	16	..	..	2	38
<i>Total .. .. .</i>	<i>2,637</i>	<i>511</i>	<i>61</i>	<i>40</i>	<i>51</i>	<i>68</i>	<i>3,368</i>
<b>Grand Total ..</b>	<b>51,312</b>	<b>9,995</b>	<b>13,108</b>	<b>592</b>	<b>628</b>	<b>833</b>	<b>76,468</b>

NOTE.—See next page for footnotes.

**LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS—  
REVENUE AND EXPENDITURE, 1955-56—continued.**

(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>EXPENDITURE (EXCLUDING LOAN EXPENDITURE).</b>							
<i>Water Supply and Sewerage—</i>							
Working Expenses ..	1,411	90	1,311	2	10	360	3,184
Depreciation ..	(h) —107	7	..	..	..	..	—100
Debt Charges ..	1,059	23	797	..	3	345	2,227
Other (including Transfers to General Revenue and Construction) ..	..	1	973	..	..	75	1,049
<i>Total .. ..</i>	<i>2,363</i>	<i>121</i>	<i>3,081</i>	<i>2</i>	<i>13</i>	<i>780</i>	<i>6,360</i>
<i>Electricity and Gas—</i>							
Working Expenses ..	38,574	8,115	5,394	433	449	..	52,965
Depreciation ..	(h) 1,155	369	..	..	47	..	1,571
Debt Charges ..	3,792	347	746	103	42	..	5,030
Other (including Transfers to General Revenue and Construction) ..	..	304	437	..	22	..	763
<i>Total .. ..</i>	<i>43,521</i>	<i>9,135</i>	<i>6,577</i>	<i>536</i>	<i>560</i>	<i>..</i>	<i>60,329</i>
<i>Railways, Tramways and Omnibuses—</i>							
Working Expenses ..	..	..	3,081	..	36	..	3,117
Depreciation ..	..	..	..	..	..	..	..
Debt Charges ..	..	..	398	..	..	..	398
Other (including Transfers to General Revenue and Construction) ..	..	..	170	..	..	..	170
<i>Total .. ..</i>	<i>..</i>	<i>..</i>	<i>3,649</i>	<i>..</i>	<i>36</i>	<i>..</i>	<i>3,685</i>
<i>Other—</i>							
Working Expenses ..	(b) 2,468	(c) 445	(d) 52	(e) 38	(f) 18	(g) 47	3,068
Depreciation ..	28	14	..	..	..	..	42
Debt Charges ..	62	43	3	..	..	9	117
Other (including Transfers to General Revenue and Construction) ..	..	42	4	..	..	10	56
<i>Total .. ..</i>	<i>2,558</i>	<i>544</i>	<i>59</i>	<i>38</i>	<i>18</i>	<i>66</i>	<i>3,283</i>
<b>Grand Total ..</b>	<b>48,442</b>	<b>9,800</b>	<b>13,366</b>	<b>576</b>	<b>627</b>	<b>846</b>	<b>73,657</b>

(a) Includes Government grant, £591,000, for part of cost of new works borne by Government.  
 (b) Abattoirs, ice-works, and production of building materials. (c) Abattoirs and hydraulic power undertakings. (d) Municipal markets, amusement parks, hotels, and cinemas. (e) Quarries.  
 (f) Quarries, ice-works and abattoirs. (g) Abattoirs. (h) Net balance after deducting charge for debt redemption. The full amount of charge for debt redemption is included under debt charges.

NOTE.—For years to which particulars relate, see preceding tables. Minus sign (–) indicates an excess of credits.

The next table shows the revenue and expenditure, other than loan, of local government business undertakings for the years 1938–39 and 1951–52 to 1955–56.

## LOCAL GOVERNMENT AUTHORITIES : BUSINESS UNDERTAKINGS—REVENUE AND EXPENDITURE.

(£'000.)

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
REVENUE (EXCLUDING LOAN RECEIPTS).							
1939 ..	6,405	1,814	3,374	113	963	528	13,197
1952 ..	26,803	6,309	10,436	380	436	1,088	45,452
1953 ..	35,654	7,656	12,798	462	469	1,212	58,251
1954 ..	41,367	8,189	13,108	504	516	1,366	65,050
1955 ..	46,972	8,770	(d)	547	569	1,296	(d)
1956 ..	51,312	9,995	(d)	592	628	833	(d)
EXPENDITURE (EXCLUDING LOAN EXPENDITURE).							
1939 ..	5,556	1,803	3,256	123	935	514	12,187
1952 ..	27,381	6,248	10,735	395	454	1,070	46,283
1953 ..	34,051	7,623	12,851	449	469	1,243	56,686
1954 ..	38,426	7,971	13,366	474	520	1,310	62,067
1955 ..	43,616	8,611	(d)	558	547	1,286	(d)
1956 ..	48,442	9,800	(d)	576	627	846	(d)

(a) Years ended previous 31st December. (b) Years ended 30th September. (c) Municipalities—Years ended 31st October; Road Districts—Years ended 30th June. (d) Not available.

(iv) *Loan Expenditure.* The table below shows particulars for 1955-56 of loan expenditure on works connected with the ordinary services and the business undertakings of local government authorities.

## LOCAL GOVERNMENT AUTHORITIES : LOAN EXPENDITURE ON WORKS, 1955-56.

(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
ORDINARY SERVICES.							
Roads, Bridges, Streets, Footpaths, Drainage and Sewerage ..	2,462	1,474	2,435	1,100	727	311	8,509
Council Properties ..	2,705	924	479	11	532	102	5,706
Parks, Gardens and Recreational Reserves ..	479	225	55	1	206	43	1,017
Other ..	(a) 454	465			21	21	
<b>Total ..</b>	<b>6,100</b>	<b>3,088</b>	<b>2,969</b>	<b>1,112</b>	<b>1,486</b>	<b>477</b>	<b>15,232</b>
BUSINESS UNDERTAKINGS.							
Water Supply ..	1,734	88	1,573	..	..	888	5,024
Sewerage ..	741	..	..	..	..	..	..
Electricity and Gas ..	6,881	981	3,128	25	49	..	11,064
Railways, Tramways and Omnibuses ..	..	..	153	..	..	..	153
Abattoirs ..	213	71	..	..	..	..	284
Other ..	..	..	66	..	..	..	66
<b>Total ..</b>	<b>9,569</b>	<b>1,140</b>	<b>4,920</b>	<b>25</b>	<b>49</b>	<b>888</b>	<b>16,591</b>
<b>Grand Total ..</b>	<b>15,669</b>	<b>4,228</b>	<b>7,889</b>	<b>1,137</b>	<b>1,535</b>	<b>1,365</b>	<b>31,823</b>

(a) Includes advances for homes, £73,000.

NOTE.—For years to which particulars relate, see next table.

The following table shows the loan expenditure on works connected with local government ordinary services and business undertakings during the years 1938-39 and 1951-52 to 1955-56 :—

**LOCAL GOVERNMENT AUTHORITIES : LOAN EXPENDITURE ON WORKS**

(£'000.)

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
<b>ORDINARY SERVICES.</b>							
1939 ..	1,758	663	1,317	43	117	39	3,937
1952 ..	4,256	1,701	4,412	512	693	468	12,042
1953 ..	4,660	1,797	2,898	410	715	351	10,831
1954 ..	4,121	1,747	2,969	785	839	237	10,698
1955 ..	4,313	2,511	(d)	959	1,121	404	(d)
1956 ..	6,100	3,088	(d)	1,112	1,486	477	(d)
<b>BUSINESS UNDERTAKINGS.</b>							
1939 ..	1,481	452	942	10	76	233	3,194
1952 ..	12,077	1,841	5,433	101	47	811	20,310
1953 ..	10,496	1,772	5,437	115	44	732	18,596
1954 ..	10,436	1,408	4,920	62	78	642	17,546
1955 ..	9,037	1,282	(d)	45	90	800	(d)
1956 ..	9,569	1,140	(d)	25	49	888	(d)

(a) Years ended previous 31st December. (b) Years ended 30th September. (c) Municipalities—Years ended 31st October; Road Districts—Years ended 30th June. (d) Not available.

### § 3. Local and Semi-Governmental Authorities' Debt.

1. **General.**—Statistics of local and semi-governmental debt for the years 1938-39 and 1953-54 to 1956-57 are given in the following paragraph. The information covers all local government authorities and those semi-governmental authorities responsible for the provision of the following services :—

*New South Wales.* Water Supply, Sewerage and Drainage, Electricity Supply, Fire Brigades, and Banking. County Councils are included among these authorities.

*Victoria.* Water Supply and Sewerage, Irrigation and Drainage, Harbours, Tramways, Electricity and Gas Supply, Fire Brigades, Marketing (Buying and Selling), Industry Assistance, Grain Elevators, Housing, and Miscellaneous.

*Queensland.* Water Supply and Sewerage, Irrigation and Drainage, Harbours, Electricity Supply, Fire Brigades, Universities, Hospitals and Ambulances, Marketing (Buying and Selling and Agency), and Industry Assistance.

*South Australia.* Irrigation and Drainage, Tramways, Electricity Supply, Fire Brigades, Hospitals and Ambulances, Marketing (Agency), Industry Assistance, Banking, Housing, and Miscellaneous.

*Western Australia.* Water Supply and Sewerage, Irrigation and Drainage, Harbours, Tramways, Electricity Supply, Fire Brigades, Hospitals and Ambulances, Marketing (Agency), and Housing.

*Tasmania.* Harbours, Electricity Supply, Fire Brigades, Transport, and Housing.

A detailed list of the authorities included is shown in *Finance, Part I.—Public and Private Finance, Bulletin No. 49, 1957-58.*

2. **Local and Semi-Governmental Authorities' Debt.**—The following table provides a summary of new money loan raisings, provisions for debt redemption, debt outstanding and interest payable by local and semi-governmental authorities for the year ended 30th June, 1957. For greater detail see *Finance, Part I.—Public and Private Finance, Bulletin No. 49, 1957-58.*

**LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES: NEW MONEY LOAN RAISINGS, REDEMPTION, DEBT AND INTEREST PAYABLE 1956-57.**  
(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>LOCAL GOVERNMENT AUTHORITIES.</b>							
<i>New Money Loan Raisings—</i>							
From Government ..	191	96	1,058	258	..	21	1,624
From Public ..	9,918	4,524	7,244	803	1,423	1,134	25,046
<i>Total ..</i>	<i>10,109</i>	<i>4,620</i>	<i>8,302</i>	<i>1,061</i>	<i>1,423</i>	<i>1,155</i>	<i>26,670</i>
<i>Funds Provided for Redemption—</i>							
Government Loans ..	71	9	1,097	371	11	10	1,569
Loans due to Public ..	4,211	1,567	2,258	266	568	352	9,222
<i>Total ..</i>	<i>4,282</i>	<i>1,576</i>	<i>3,355</i>	<i>637</i>	<i>579</i>	<i>362</i>	<i>10,791</i>
Accumulated Sinking Fund Balance ..	5,601	2,725	4,324	..	45	170	12,865
<i>Debt—</i>							
Due to Government ..	1,845	505	13,844	1,166	260	133	17,753
Due to Banks (Net Overdraft) ..	185	447	..	..	5	..	637
Due to Public Creditor(a) ..	68,787	29,393	66,159	3,159	6,985	8,351	182,834
<i>Total(a) ..</i>	<i>70,817</i>	<i>30,345</i>	<i>80,003</i>	<i>4,325</i>	<i>7,250</i>	<i>8,484</i>	<i>201,224</i>
Maturing Overseas(a)(b) ..	1,812	..	2,537	..	..	..	4,349
Annual Interest Payable(a) ..	(c)	1,354	3,436	(c)	333	378	(c)
<b>SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES.</b>							
<i>New Money Loan Raisings—</i>							
From Government ..	11,849	15,593	660	10,898	5,630	7,014	51,644
From Public ..	15,248	34,510	7,393	2,351	2,373	902	62,777
<i>Total ..</i>	<i>27,097</i>	<i>50,103</i>	<i>8,053</i>	<i>13,249</i>	<i>8,003</i>	<i>7,916</i>	<i>114,421</i>
<i>Funds Provided for Redemption—</i>							
Government Loans ..	775	1,086	274	957	414	472	3,978
Loans due to Public ..	4,420	2,207	3,412	10	182	265	10,496
<i>Total ..</i>	<i>5,195</i>	<i>3,293</i>	<i>3,686</i>	<i>967</i>	<i>596</i>	<i>737</i>	<i>14,474</i>
Accumulated Sinking Fund Balance ..	18,206	8,353	1,516	952	322	353	29,702
<i>Debt—</i>							
Due to Government ..	133,096	161,593	7,636	91,660	33,256	65,688	492,929
Due to Banks (Net Overdraft) ..	2,800	2,952	584	22	44	..	6,402
Due to Public Creditor(a) ..	199,391	322,952	53,039	22,651	13,512	12,199	623,744
<i>Total(a) ..</i>	<i>335,287</i>	<i>487,497</i>	<i>61,259</i>	<i>114,333</i>	<i>46,812</i>	<i>77,887</i>	<i>1,123,075</i>
Maturing Overseas(a)(b) ..	7,000	4,345	..	767	..	..	12,112
Annual Interest Payable(a) ..	(c)	19,528	2,736	4,572	2,117	3,048	(c)

(a) Includes debt or interest payable in London and New York. The former is expressed in United Kingdom currency, the latter is payable in dollars which have been converted at the rate of 4.8665 dollars to £1. (b) Included in debt figures above. (c) Not available.

In this and the following tables, debt includes all liabilities for which arrangements have been made for repayment over a period of one year or more, and net overdrafts. Interest capitalized and amounts due for the capital cost of assets or for services rendered which are to be repaid over a period of one year or more are included. Current liabilities, such as interest accrued (but not capitalized), trade creditors, amounts held in trust and other debts which are to be repaid in less than one year are not included. Net overdraft is the gross overdraft of all funds less all bank credit balances (including fixed deposits) which do not form part of a sinking fund to repay a loan. New loans raised during the year include new loan liabilities incurred during the year, loans raised to repay indebtedness to the Government, and interest capitalized. Loans raised and redeemed within the year, increases in overdrafts and loans raised for conversion or redemption of existing debt are

excluded. Funds provided for redemption include instalments of principal repaid and amounts credited to sinking funds established for the purpose of repaying the debt on maturity. Amounts provided for redemption from loans raised for that purpose are excluded.

In the following table, a summary is given of new money loan raisings, provisions for the redemption of debt and debt outstanding of local and semi-governmental authorities for the years 1938-39 and 1953-54 to 1956-57.

**LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES, AUSTRALIA : NEW MONEY LOAN RAISINGS, REDEMPTION AND DEBT.**  
(£'000.)

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.
<b>LOCAL GOVERNMENT AUTHORITIES.</b>					
<i>New Money Loan Raisings—</i>					
From Government .. .. .	371	3,001	3,413	2,233	1,624
From Public .. .. .	7,060	23,723	24,352	22,160	25,046
<i>Total</i> .. .. .	<i>7,431</i>	<i>26,724</i>	<i>27,765</i>	<i>24,393</i>	<i>26,670</i>
<i>Funds provided for Redemption—</i>					
Government Loans .. .. .	2,141	1,332	1,477	1,555	1,569
Loans due to Public .. .. .	2,995	6,855	8,151	8,597	9,222
<i>Total</i> .. .. .	<i>5,136</i>	<i>8,187</i>	<i>9,628</i>	<i>10,152</i>	<i>10,791</i>
Accumulated Sinking Fund Balance .. .. .	(a)	10,352	11,493	11,955	12,865
<i>Debt—</i>					
Due to Government .. .. .	13,207	15,290	17,265	17,907	17,753
Due to Banks (Net Overdraft) .. .. .	1,544	795	362	948	637
Due to Public Creditor(b) .. .. .	76,582	140,847	158,350	169,891	182,834
<i>Total(b)</i> .. .. .	<i>91,333</i>	<i>156,932</i>	<i>175,977</i>	<i>188,746</i>	<i>201,224</i>
Maturing Overseas(b)(c) .. .. .	17,893	3,914	4,499	4,431	4,349
<b>SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES.</b>					
<i>New Money Loan Raisings—</i>					
From Government .. .. .	1,524	66,363	51,234	53,482	51,644
From Public .. .. .	7,038	64,840	64,555	58,674	62,777
<i>Total</i> .. .. .	<i>8,562</i>	<i>131,203</i>	<i>115,789</i>	<i>112,156</i>	<i>114,421</i>
<i>Funds provided for Redemption—</i>					
Government Loans .. .. .	699	2,738	3,328	6,866	3,978
Loans due to Public .. .. .	1,146	11,028	5,984	7,552	10,496
<i>Total</i> .. .. .	<i>1,845</i>	<i>13,766</i>	<i>9,312</i>	<i>14,418</i>	<i>14,474</i>
Accumulated Sinking Fund Balance .. .. .	(a)	19,604	22,306	25,311	29,702
<i>Debt—</i>					
Due to Government .. .. .	(d)44,817	352,526	401,080	446,112	492,929
Due to Banks (Net Overdraft) .. .. .	2,006	1,264	2,195	9,994	6,402
Due to Public Creditor(b) .. .. .	118,506	439,338	503,515	560,074	623,744
<i>Total(b)</i> .. .. .	<i>d165,329</i>	<i>793,128</i>	<i>906,790</i>	<i>1,016,180</i>	<i>1,123,075</i>
Maturing Overseas(b)(c) .. .. .	12,088	13,176	13,616	13,556	12,112

(a) Not available. (b) Includes debt in London and New York. The former is expressed in United Kingdom currency, the latter is payable in dollars which have been converted at the rate of 4.8663 dollars to £1. (c) Included in debt figures above. (d) Approximate only.

#### § 4. Roads and Bridges.

1. Commonwealth Government Grants.—The following table shows the allocation to the States, under the several Commonwealth Aid Roads Acts for road construction, maintenance, repair and other works connected with transport for each of the years 1938-39 and 1953-54 to 1957-58, and to the Commonwealth for expenditure on the construction and maintenance of strategic roads and for the promotion of road safety practices for each of the years 1933-54 to 1957-58. See also Chapter XXI.—Public Finance, and *Finance* bulletins.

**ROAD CONSTRUCTION, MAINTENANCE, ETC. : GRANTS UNDER THE  
COMMONWEALTH AID ROADS ACTS.  
(£'000.)**

Year ended 30th June—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth. (a)	Total.
1939 ..	1,199	747	815	474	819	213	..	4,267
1954 ..	4,641	2,863	3,160	1,810	3,160	823	600	(b)22,057
1955 ..	5,893	3,771	4,125	2,409	4,190	1,073	900	22,361
1956 ..	7,282	4,660	5,097	2,976	5,178	1,326	950	27,469
1957 ..	8,587	5,495	6,009	3,509	6,105	1,563	950	32,218
1958 ..	9,495	6,264	6,585	3,879	6,658	1,733	1,000	35,614

(a) Allocation for expenditure on the construction and maintenance of strategic roads and the promotion of road safety practices. (b) Includes £5,000,000 paid into the Commonwealth Aid Roads (Supplementary) Trust Account to be expended on grants to the States for roads purposes in subsequent years.

2. New South Wales.—(i) *General.* A central road authority, known as the Main Roads Board, was created by legislation in 1925 for the purpose of providing improved and uniform standards of construction, reconstruction and maintenance of the principal roads of the State and to administer government subsidies for works on those roads. Subsequently, the Main Roads administration was reorganized as a separate department under the control of a Commissioner. The activities of the Department of Main Roads embrace works on main and developmental roads throughout the State, all roads in the unincorporated portion of the Western Division, and certain associated works, principally bridges and vehicular ferries, constructed from government funds. The Department of Main Roads co-operates with the municipal and shire councils in the work of constructing and maintaining the main roads system.

Public roads, except those within the City of Sydney, may be proclaimed as main roads on the recommendation of the Commissioner for Main Roads, who takes into consideration the representations made by the councils concerned, availability of funds for construction and maintenance purposes, and the value of the roads as connecting links between centres of population or business. The classes of main roads are (i) the State Highways which form the principal avenues of road communication throughout the State and connect with similar avenues in other States; (ii) Trunk Roads, which, with the State Highways, form the framework of a general system of intercommunication throughout the State; (iii) Ordinary Main Roads, which provide a network of roads connecting towns and important centres of population with the State Highways and Trunk Roads and with each other. In addition to the Main Roads, there are also (i) Secondary Roads (in the County of Cumberland) which carry a substantial volume of through traffic and, thereby relieve neighbouring main roads of traffic, and (ii) Developmental Roads which help to develop country districts.

In the County of Cumberland, which for the purposes of the Main Roads Act is deemed to include the City of Blue Mountains and small sections of other councils' areas on the boundary of the County of Cumberland, the full cost of road and bridge construction is paid from the funds of the Department of Main Roads. The Councils contribute towards the cost at the rate of ¼d. in the £ on the unimproved value of ratable property. The rate payable in respect of lands used principally for primary production is one-half the rate levied on other lands. In country districts, the Department meets the full cost of road and bridge works on state highways, the full cost of bridge works and three-quarters of the cost of road works on trunk roads, and three-quarters of the cost of bridge works and two-thirds of the cost of road works on main roads. The cost of constructing developmental roads and works is borne in full by the Department of Main Roads, but local Councils are required to maintain them in a satisfactory condition. The Department of Main Roads meets half the cost of works on secondary roads.

(ii) *Length of Roads.* (a) *Proclaimed Roads.* The following table shows lengths of proclaimed roads at 30th June, 1958, according to class of road:—

**PROCLAIMED ROADS, NEW SOUTH WALES : LENGTHS, 30th JUNE, 1958.  
(Miles.)**

Division.	Main Roads.				Secondary Roads.	Develop- mental Roads.	Total.
	State High- ways.	Trunk Roads.	Ordinary Main Roads.	Total.			
Eastern and Central..	5,196	2,878	9,690	17,764	(a) 82	2,698	20,544
Western ..	1,312	1,302	2,066	4,680	..	..	4,680
<b>Total ..</b>	<b>6,508</b>	<b>4,180</b>	<b>11,756</b>	<b>22,444</b>	<b>82</b>	<b>2,698</b>	<b>25,224</b>

(a) Metropolitan area.

During 1957–58, 93 miles of new development roads were proclaimed and 72 miles were removed from the list of proclaimed roads. Only one mile of new main road was proclaimed during the year and 32 miles were removed from the list.

The length of main and secondary roads maintained by the Department of Main Roads at 30th June, 1958 (excluding the Western Division) was 3,074 miles (17 per cent.), while the length maintained by councils was 14,772 miles (83 per cent.). The proportions of the several classes of main roads maintained by the Department and councils respectively were :—State highways, 47 per cent., 53 per cent. ; trunk roads, 2 per cent., 98 per cent. ; ordinary main roads, 6 per cent., 94 per cent. Secondary roads were wholly maintained by councils. In the County of Cumberland (the metropolis and adjoining areas), the Department maintained 56 per cent. of the roads (525 miles).

(b) *Composition of Roads.* In 1957, the total length of all roads in New South Wales was estimated at 127,097 miles, including 4,929 miles in the unincorporated area of the Western Division. The lengths of roads, according to their composition or nature, were as follows:—cement concrete, 412 miles; asphaltic concrete, 223 miles; tar or bituminous macadam, 5,698 miles; surface water-bound macadam, 7,949 miles; water-bound macadam, 1,458 miles; gravel or crushed rock, 42,522 miles; formed only, 27,604 miles; cleared or natural surface only, 41,231 miles.

(iii) *Main Roads Department.* (a) *General.* Progress has continued with the implementation of the Main Roads Department plan for main road development in the metropolis and the balance of the County of Cumberland. The plan has been incorporated in the County of Cumberland Planning Scheme approved by Parliament under the Local Government (Amendment) Act 1951. Detailed planning of the Newcastle and District Arterial Roads System is well advanced and some sections of the system have already been constructed. Surveys and designs have been advanced in the planned Wollongong-Port Kembla District Main Roads System.

In addition to its construction and maintenance work on roads, the Main Roads Department is engaged on a scheme for widening metropolitan roads. The acquisition of land required to implement approved schemes is proceeding.

During 1957–58, 64 new bridges were constructed. In addition, 25 concrete box culverts having a waterway width of 20 feet or more were completed. Major bridge works under construction include steel and/or concrete bridges over Double Creek on the Prince's Highway (length 450 feet); over the Murray River at Albury on the Hume Highway (length 300 feet); over the Mackay River at Kempsey on the Pacific Highway (length 917 feet); over the Mehi River at Moree on the Gwydir Highway (length 374 feet); over the Richmond River at Casino on State Highway No. 16 (length 482 feet); over the Wollamba River between Forster and Tuncurry (length 2,074 feet) and over the Castlereagh River at Mendooran (length 313 feet).

(b) *Receipts and Payments.* The funds of the Department of Main Roads are derived principally from taxation of motor vehicles, contributions by the Commonwealth Government under the Commonwealth Aid Roads Acts (see Chapter XXI.—Public Finance, for some particulars of the basis and distribution of grants under these Acts and para. 1 of this section for particulars of the amounts allocated in recent years), contributions by municipal and shire councils, and special (not statutory) assistance by the State Government by way of loan moneys or special grants from revenue funds. Receipts and payments for the four years 1954–55 to 1957–58 compared with the income and expenditure for 1938–39 are shown below.

**DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES : RECEIPTS AND PAYMENTS.**

(£.)

Item.	1938–39. (a)	1954–55.	1955–56.	1956–57.	1957–58.
<b>RECEIPTS.</b>					
Motor Vehicle Taxation, Registration and Licence Fees .. .. .	2,018,556	7,279,705	7,675,281	7,944,583	8,444,589
Commonwealth Aid Roads and Works Act .. .. .	1,176,039	4,132,187	4,646,788	5,165,020	6,568,726
State (Consolidated Revenue) Grants Contributions by Other Departments and Bodies .. .. .	13,549	375,313	413,120	275,453	346,903
Councils' Contributions .. .. .	250,679	707,230	878,621	971,198	1,119,731
Loans—					
From State Consolidated Revenue .. .. .	..	..	..	298,072	..
From State Loan Fund .. .. .	302,643	200,000	150,000	150,000	150,000
Other .. .. .	54,782	48,018	56,827	58,848	90,426
<b>Total .. .. .</b>	<b>3,816,248</b>	<b>12,742,453</b>	<b>13,820,637</b>	<b>14,863,174</b>	<b>17,120,375</b>

NOTE.—See next page for footnotes.

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES: RECEIPTS AND PAYMENTS—*continued.*

(£.)

Item.	1938-39. (a)	1954-55.	1955-56.	1956-57.	1957-58.
<b>PAYMENTS.</b>					
<b>Roads and Bridges—</b>					
Construction .. .. .	1,736,898	6,896,403	7,157,110	7,813,332	9,361,017
Maintenance .. .. .	1,519,929	5,546,974	5,946,283	6,174,524	6,096,227
<b>Debt Charges—</b>					
Interest, Exchange, etc.	152,469	140,233	151,652	171,242	184,067
Debt Redemption .. .. .	200,591	33,735	36,299	38,677	39,966
Purchase of Assets(b) .. .. .	..	81,584	260,551	168,766	280,664
Suspense Accounts(c) .. .. .	..	—326,317	—156,924	—217,258	—66,418
Administration, etc. .. .. .	100,583	458,428	515,715	562,056	614,098
Other .. .. .	914	36,495	60,057	53,120	229,225
<b>Total .. .. .</b>	<b>3,711,384</b>	<b>12,867,535</b>	<b>13,970,743</b>	<b>14,764,459</b>	<b>16,738,846</b>

(a) Income and expenditure. (b) Excludes plant and motor vehicles. (c) Includes purchase and operation of Department's Plant and Vehicles not included elsewhere.

NOTE.—Minus sign (—) indicates excess of receipts over payments.

The figures shown above represent the aggregate receipts and payments of five funds—the County of Cumberland Main Roads General and Special Purposes Funds, the Country Main Roads General and Special Purposes Funds, and the Developmental Roads Fund.

The total expenditure on roads, streets and bridges in the State by all authorities during the years 1938-39 and 1952-53 to 1956-57 was, respectively, £8,891,000, £20,004,000, £22,510,000, £26,878,000, £29,595,000 and £33,249,000. These figures are approximate and they include expenditure on construction, maintenance and direct administration, but not on debt charges. Expenditure on the Sydney Harbour Bridge is not included.

(c) *Sydney Harbour Bridge.* The Sydney Harbour Bridge was opened for traffic on 19th March, 1932. The main span is 1,650 feet and the clearance for shipping 170 feet from high water level. The deck, 160 feet wide, carries a roadway and two railway tracks and there is also a footway on each side. The capital cost of the bridge to the 30th June, 1958, was £9,578,006, but this amount will be reduced slightly on completion of the disposal of the remaining surplus resumed property. The portion met from repayable loan funds, over £7,900,000, is repayable from toll income. The accumulated balance of the Bridge Account at 30th June, 1958, showed a surplus of £213,265, after the transfer of sums totalling £2,155,000 to a reserve account. Annual income, after a decline to less than £300,000 during the 1939-45 War, has risen from about £400,000 in 1938-39 to over £1,021,000 in 1957-58, while expenditure over the same period has varied between £424,000 and £778,000. In 1957-58, income included road tolls, £836,897, railway passenger tolls, £139,908, and tram and omnibus passenger tolls, £17,641. Expenditure amounted to £778,142, including interest, exchange, flotation expenses, etc., £301,619, sinking fund, £101,968, maintenance £150,055, and major improvements (including conversion of tram tracks to roadways), £119,578. During 1957-58, 24,205,000 rail travellers, 16,498,000 tram and omnibus travellers, and 37,346,000 road travellers in 23,071,000 road vehicles crossed the bridge, contributing, respectively, 14 per cent., 2 per cent. and 84 per cent. of the total toll revenue.

3. *Victoria.*—(i) *General.* With the object of improving the main roads of the State, the Country Roads Board was established by legislation passed in 1912. The principal duties of the Board are to determine the main roads, State highways, tourists' roads, etc., to inquire into the State's resources in road materials and the most effective methods of road construction and maintenance, and to recommend deviations in existing roads or the construction of new roads in order to facilitate communication or to improve the conditions of traffic.

(ii) *Length of Roads.* (a) *Declared Roads.* The total length of declared roads in Victoria at 30th June, 1958, was 14,392 miles, classified as follows:—State highways, 3,845 miles; main roads, 9,754 miles; tourist roads, 415 miles; forest roads, 378 miles. The total length of the surface treated (black) or higher type of pavements included in the foregoing totals was 9,294 miles or 64 per cent.

(b) *Composition of Roads.* It is estimated that, in addition to the 14,392 miles of classified roads as above, there were approximately 86,000 miles of unclassified roads at 30th June, 1958. The latest detailed estimate of the length of roads and streets in Victoria

(as at 30th September, 1954) provides the following information:—Wood or stone, 61 miles; portland cement concrete, 135 miles; asphaltic concrete and sheet asphalt, 233 miles; tar or bitumen surface seal, 12,197 miles; water-bound macadam, gravel, sand and hard loam pavements, 31,766 miles; formed only, 25,040 miles; not formed, 30,531 miles; total, 99,963 miles.

(iii) *Country Roads Board. (a) General.* During 1956–57, 1,301 miles, and in 1957–58, 1,733 miles, of declared roads under the Board's control were treated with bitumen. In addition, in 1956–57, 291 miles, and in 1957–58, 534 miles of undeclared roads, for which the Board contributed funds, were similarly treated. The total length of bitumen treatment carried out in 1956–57 was 1.712 miles and in 1957–58 2.353 miles. Of the work on the roads under the Board's control, 537 miles in 1956–57 and 626 miles in 1957–58 related to State Highways.

During 1956–57, 193 bridge projects with the total value of £1,721,130 and in 1957–58 234 bridge projects with a total value of £1,894,000 were initiated.

Of these, 152 of a total value of £610,430, and 165 costing £623,000 were under municipal supervision in 1956–57 and 1957–58 respectively.

(b) *Receipts and Payments.* The funds of the Country Roads Board are derived principally from motor registration fees, two thirds of all money received by way of owners' certificates, one half of drivers' licence fees, fines, payments by the Commonwealth Government under the Commonwealth Aid Roads Acts, road charges under the Commercial Goods Vehicles Act and repayments by municipalities. In addition, loans have been authorized from time to time under the Country Roads Acts for permanent works on main and developmental roads, State highways, tourists' and forest roads, while the State Government has provided, free of repayment, loan moneys for restoration of flood and bush fire damage. During the year ended 30th June, 1958, loan receipts and payments each amounted to £402,822, and expenditure included £460,452 for restoration of flood and bush fire damage. The total loan expenditure to 30th June, 1958, was £12,933,309. This figure does not include loan expenditure from the Developmental Roads Loan Account, a fund which was created for the purpose of constructing and maintaining subsidiary or developmental roads. Loan money raised on this account was exhausted at 30th June, 1937, the total expenditure at that date being £6,425,758.

Total receipts and payments during each of the years 1938–39 and 1954–55 to 1957–58 are shown below :—

#### COUNTRY ROADS BOARD, VICTORIA : RECEIPTS AND PAYMENTS.

(£.)

Item.	1938–39. (a)	1954–55.	1955–56.	1956–57.	1957–58.
<b>RECEIPTS.</b>					
Motor Vehicle Registration Fees ..	1,690,962	4,647,372	4,984,855	6,211,564	8,013,268
Drivers' Licence Fees(b) ..	..	181,728	199,852	207,892	219,342
Municipalities' Payments ..	318,878	387,561	501,110	530,418	560,092
Commonwealth Aid Roads Acts(c) ..	716,019	3,802,369	4,430,575	5,247,438	6,158,907
Loans from State Government ..	57,972	1,102,309	1,092,950	404,679	402,822
Surplus Transport Regulation Fund ..	..	387,992	..	..	..
Advance from Public Account ..	..	..	500,000	..	..
Stores and Materials ..	233,104	..	..	..	..
Hire of Plant ..	53,724	..	..	..	..
Commonwealth-State Contribution for restoration of flood damage ..	..	..	..	236,641	460,452
Road Charges—Commercial Goods Vehicles Act ..	..	..	215,789	1,314,784	1,529,236
Other ..	117,341	1,309	24,809	28,173	37,114
<b>Total ..</b>	<b>3,188,000</b>	<b>10,510,640</b>	<b>11,949,940</b>	<b>14,181,589</b>	<b>17,381,233</b>

NOTE.—See next page for footnotes.

COUNTRY ROADS BOARD, VICTORIA: RECEIPTS AND PAYMENTS—*continued.*  
(£.)

Item.	1938-39. (a)	1954-55.	1955-56.	1956-57.	1957-58.
PAYMENTS.					
Construction and Maintenance of Roads and Bridges—					
State Highways .. .. .	453,708	3,033,653	3,495,182	4,079,366	4,988,708
Main Roads .. .. .	1,027,210	3,566,478	3,889,291	3,921,041	5,428,679
Tourist Roads .. .. .	77,694	294,590	342,839	285,127	457,735
Forest Roads .. .. .	..	139,119	144,684	116,388	127,775
Unclassified Roads .. ..	468,122	1,445,032	1,947,134	2,508,782	3,615,378
Roads adjoining Commonwealth Properties .. .. .	13,321	..	..	..	..
Other .. .. .	(d) 58,729	30,181	50,484	72,895	107,469
Relief to Municipalities .. ..	240,170	..	..	..	..
Plant, Stores and Materials .. ..	310,332	584,826	627,011	620,626	1,053,254
Interest, Debt Redemption, etc. ..	427,445	676,012	745,873	792,321	831,077
Repayment of Advance .. .. .	..	..	..	500,000	..
Administration Expenditure and Other .. .. .	230,125	621,478	789,374	958,719	969,540
<b>Total .. .. .</b>	<b>3,306,856</b>	<b>10,391,369</b>	<b>12,031,872</b>	<b>13,855,265</b>	<b>17,579,615</b>

(a) Figures for 1938-39 are not directly comparable with those of succeeding years owing to a change in the method of compilation adopted by the Country Roads Board. (b) Prior to 1st July, 1949, drivers' licence fees were paid into Consolidated Revenue Fund. From that date until 31st December, 1950, the fees were credited to the funds of the Country Roads Board. Since then, one half of the fees has been credited to the funds of the Country Roads Board while the remaining half has been credited to the Municipalities Assistance Fund. (c) Excludes portion of Commonwealth Aid Roads Acts advances drawn by the Public Works Department for expenditure on wharfs, jetties, etc. (d) Includes £54,662 expenditure on unemployment relief works.

(iv) *Level Crossings.* In 1954-55, the Level Crossings Fund was created under the Country Roads and Level Crossings Funds' Act 1954 to finance (a) the elimination of level crossings or the provision of alternative routes to enable road traffic to avoid level crossings, (b) the provision of lights, signs, and lighting at and the improvement of approaches to level crossings and (c) generally, the reduction of danger at level crossings. The Act provides for the payment into the Fund of one third of all moneys received by way of owners' certificates and money provided under any other Act. The amount available for expenditure in 1957-58 was £728,154 comprising receipts from owners' certificates, £255,997, and the balance brought forward from 1956-57, £472,157. Expenditure from the Fund amounted to £319,088 of which £196,481 was incurred by the Railways Department and the balance by the Country Roads Board.

4. *Queensland.*—(i) *General.* Under the Main Roads Act 1920, a Main Roads Board was constituted, consisting of three members appointed by the Governor-in-Council. In 1925, the Board was abolished and its powers conferred upon a single Commissioner. The Main Roads Commission was constituted a Department under the name of the Department of Main Roads in February, 1951, with the Commissioner of Main Roads as its permanent head. The duties of the Commissioner are to carry out surveys and investigations necessary to determine State highways, main, developmental, secondary, mining access, farmers' and tourist roads and tourist tracks, and the responsibility for building and maintaining these declared roads is largely that of the Commissioner. Roads of purely local importance are constructed and maintained by local authorities. In many cases, construction is financed by the State Government by means of Treasury loans. Other roads may be built by the Public Estate Improvement Branch of the Lands Department in order to open up areas of previously inaccessible or undeveloped country.

(ii) *Length of Roads.* (a) *Declared Roads.* The total length of declared roads in Queensland at 30th June, 1957, was 20,975 miles, comprising State highways, 8,246 miles; main roads, 10,636 miles; developmental roads, 235 miles; secondary roads, 646 miles; mining access roads, 606 miles; farmers' roads, 308 miles; tourist roads, 297 miles; tourist tracks, one mile. The length of roads improved in Queensland from the date of commencement of work under the Main Roads Acts 1920-1952 to 30th June, 1957, was 13,911 miles (66 per cent.). At that date also, 836 miles of new road construction and 504 miles of stage construction work were proceeding.

(b) *Composition of Roads.* The total length of roads and streets in Queensland at 30th June, 1957, was:—Concrete or other high standard, 208 miles; paved-sealed, 6,921 miles; paved unsealed, 17,465 miles; formed only, 35,015 miles; cleared only, 13,298 miles; natural state, 47,950 miles; total, 120,857 miles.

(iii) *Department of Main Roads. (a) General.* During 1956-57, the Department completed 1,489 miles of roads including new construction and stage construction. Bridges of all types to a length of 5,984 linear feet were constructed, bringing the total constructed by the Department at 30th June, 1957, to 190,034 feet. In addition, at 30th June, 1957, 5,945 feet were under construction.

(b) *Receipts and Payments.* The funds of the Department of Main Roads are obtained chiefly from motor vehicle registration and collections, fees, etc., under the Transport Acts, contributions under the Commonwealth Aid Roads Acts and loans, grants and advances from the State Government. The total receipts and payments, including amounts for defence works, during each of the years 1938-39 and 1953-54 to 1956-57 are shown below :—

**DEPARTMENT OF MAIN ROADS, QUEENSLAND : RECEIPTS AND PAYMENTS.**  
(£.)

Item.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.
<b>RECEIPTS.</b>					
Motor Vehicle Registration, Transport Acts Collections, Fees, etc. . .	938,227	3,766,460	4,075,193	4,342,483	4,608,807
Loans from State Government ..	392,225	100,000	..	380,000	..
Grants, Advances, Refunds, etc. from State Government ..	579,775	349,315	..	..	..
Commonwealth Aid Roads and Works Acts ..	806,218	3,454,665	4,414,226	5,135,202	6,012,899
Maintenance Repayments—Local Authorities ..	98,154	311,212	368,711	406,998	590,885
Hire, Rent, Sales of Plant, etc. ..	288,330	91,875	615,080	765,687	882,316
Other ..		400,676	329,549	415,931	405,555
<b>Total .. ..</b>	<b>3,102,929</b>	<b>8,474,203</b>	<b>9,802,759</b>	<b>11,446,301</b>	<b>12,500,462</b>
<b>PAYMENTS.</b>					
Permanent Road Works and Surveys	2,045,900	3,930,659	6,091,811	6,344,024	7,953,553
Maintenance of Roads ..	331,734	1,603,418	2,077,429	2,521,193	2,372,221
Plant, Machinery, Buildings, etc. (including Plant Maintenance) ..	73,632	837,504	1,390,728	1,070,648	1,287,443
Loans—Interest ..	38,861	264,619	265,079	253,050	242,592
Redemption ..	78,153	250,156	250,817	255,224	256,048
Payments to State Consolidated Revenue ..	340,244	..	..	..	..
Payments to Local Authorities ..	27,418	1,625	1,625	1,625	1,743
Administration, etc. ..	151,700	699,428	803,671	905,599	1,021,017
<b>Total .. ..</b>	<b>3,087,642</b>	<b>7,587,409</b>	<b>10,881,160</b>	<b>11,351,363</b>	<b>13,134,617</b>

5. *South Australia.—(i) General.* The Highways and Local Government Department is administered by the Commissioner of Highways, who is empowered, subject to the approval of the Minister of Roads, to undertake the construction, maintenance and protection of the principal roads of the State. In addition, the Commissioner—

- (a) allocates grants to councils for roadworks and supervises the expenditure.
- (b) assists Councils to purchase road-making plant and to defray the cost of roadworks.
- (c) advises Councils on any question concerning the construction, maintenance or repair of roads.

(ii) *Source of Funds.* Funds of the Department are derived mainly from—

- (a) *State Government.* The Highways Fund, into which are paid the proceeds from motor vehicle registrations and drivers' licences (less cost of collection), appropriations from loan funds, repayments of advances made to Councils and contributions by the Municipal Tramways Trust.
- (b) *Commonwealth Government.* Contributions under the Commonwealth Aid Roads Acts.

(iii) *Length of Roads.* In South Australia, there are only two classifications of roads. These are Main Roads proclaimed under the provisions of the Highways Act and all other roads, commonly designated District Roads. At 30th June, 1958, there were 8,188 miles of proclaimed Main Roads and 54,012 miles of District Roads, totalling 62,200 miles. Of these, 28,980 miles are unformed and carry little or no traffic and a further 15,504 miles, which have been formed only, are open to traffic during most of the year. Of the remainder, there are 12,962 miles of road constructed with gravel or crushed rock and 4,754 miles of a higher standard constructed with either bitumen or concrete.

(iv) *State Highways and Local Government Department, Receipts and Payments.* The following table shows particulars of receipts and payments, during the years 1938-39 and 1953-54 to 1956-57, of funds controlled by the Highways and Local Government Department.

**HIGHWAYS AND LOCAL GOVERNMENT DEPARTMENT, SOUTH AUSTRALIA :  
RECEIPTS AND PAYMENTS.**

(£.)

Item.	1938-39. (a)	1953-54.	1954-55.	1955-56.	1956-57.
<b>RECEIPTS.</b>					
Motor Vehicle Registration, Licences, Fees, Fines, etc. ..	690,849	2,230,045	2,997,668	3,221,230	3,404,557
Commonwealth Aid Roads and Works Acts .. ..	479,922	1,873,227	2,555,471	2,958,943	3,481,627
Loans from State Government ..	200,000	..	200,000	100,000	10,000
Recoups—Local and Semi-governmental Authorities .. ..	1,531	10,443	9,978	..	..
Other .. ..					
<b>Total .. ..</b>	<b>1,372,302</b>	<b>4,377,171</b>	<b>6,111,584</b>	<b>6,679,365</b>	<b>7,312,611</b>
<b>PAYMENTS.</b>					
Construction and Reconstruction of Roads and Bridges .. ..	b 1,150,082	214,2728	2,877,748	3,658,078	3,569,676
Maintenance .. ..					
Recoups to Consolidated Revenue Fund—Interest, Debt Redemption and Exchange .. ..	c 178,273	157,749	168,297	182,910	189,150
Grants and Advances to Local and Semi-governmental Authorities Administration .. ..	(d)	1,343,381	1,209,958	470,243	263,705
Stores, Plant, Machinery, Suspense Accounts, etc. .. ..	45,753	161,562	722,539	424,206	1,049,861
Other .. ..					
<b>Total .. ..</b>	<b>1,374,108</b>	<b>5,027,688</b>	<b>6,146,833</b>	<b>6,751,756</b>	<b>7,347,886</b>

(a) Figures for 1938-39 are not completely comparable with those for following years. (b) Roads, plant, etc. (c) Interest and sinking fund payments. (d) Not available separately; included elsewhere.

The total expenditure, both revenue and loan, by State and local governments on roads, streets and bridges in South Australia during the years 1938-39 and 1953-54 to 1956-57 was, respectively, £1,966,000, £6,131,000, £7,539,000, £8,812,000 and £9,228,000.

6. Western Australia.—(i) *General.* Roads in Western Australia comprise two main categories, those declared as "main", "developmental" or "controlled-access" roads under the provisions of the Main Roads Act, 1930-1955, and all other roads.

Declared roads come under the control of the Commissioner of Main Roads, while all other roads remain the responsibility of the several Municipalities and District Road Boards throughout the State. While the construction and maintenance of "main" roads and the construction of "developmental" roads are the responsibility of the Commissioner of Main Roads, "developmental" roads must be maintained by the Municipalities or Road Boards in whose districts such roads are situated.

(ii) *Length of Roads and Streets.* The total length of roads and streets in Western Australia at 30th June, 1957, was made up as follows:—Bituminous, 6,487 miles; gravel water bound, 15,519 miles; other constructed surfaces, 1,421 miles; formed only, 39,042 miles; unprepared, 26,216 miles (incomplete); total, 88,685 miles.

The lengths of declared roads at 30th June, 1957, included in the preceding figures, were:—Main roads, 3,487 miles; important secondary roads, 6,929 miles; developmental roads, 13,702 miles; total, 24,118 miles.

(iii) *Main Roads Department.* The Commissioner's duties relate to the determination of main roads after consideration of the funds available and the services to be rendered by the roads, the construction and maintenance of such main roads, the declaration and provision of developmental roads, and the carrying out of surveys, investigations and experiments connected with roads and road materials. The Act authorizes two trust accounts (Main Roads Trust Account and Main Roads Contribution Trust Account) to record the moneys prescribed as available to the Commissioner for expenditure associated with roads, etc. In addition, the Commissioner operates on other Trust Accounts which are used for funds made available under the Commonwealth Aid Roads Act. During the year 1956–57, the activities of the Department included:—Clearing, 1,796 miles; forming, 1,916 miles; gravelling, 1,398 miles; reconditioning, 4,651 miles; stabilizing, 255 miles; side drains, 81 miles. In addition, the length of tar and bitumen work completed was 1,387 miles. Construction of the 260 miles of the Wyndham-Ord River-Nicholson road was completed during the year. Bridges constructed numbered 31. On 12th March, 1957, the State Government accepted a tender for the construction of a bridge over the Swan River at the Narrows, Perth, the work to be completed by April, 1959. During 1956–57, the Department's Traffic Engineering Branch included in its activities special surveys and investigations in connexion with controlled access highways as proposed in the Stephenson-Hepburn Regional Plan; studies and design relating to the approaches to the Narrows Bridge; roadmarking and signposting taken over from the Police Traffic Branch; and other general traffic matters including surveys of metropolitan traffic volume, design and implementation of the Perth City Kerbside Parking Scheme and the preparation of plans for the installation of city and suburban traffic lights.

(iv) *Receipts and Payments—Combined Road Funds.* The following table shows the combined transactions of the Main Roads Trust Account, the Main Roads Contributions Trust Account, the Metropolitan Traffic Trust Account, and the Commonwealth Aid Roads and Works Trust Accounts during the years ended 30th June, 1939 and 1954 to 1957.

#### ROAD FUNDS, WESTERN AUSTRALIA : RECEIPTS AND PAYMENTS.

(£.)

Item.	1938–39. (a)	1953–54.	1954–55.	1955–56.	1956–57.
<b>RECEIPTS.</b>					
Motor Vehicle Registration, Licences, Fees, Fines, etc. . .	218,962	523,495	584,454	636,464	801,235
Commonwealth Aid Roads and Works Acts . . . . .	823,162	3,212,454	4,411,656	5,110,892	6,037,821
Recoups from Local Authorities, etc. . . . .	1,958	199,591	273,886	233,285	154,661
Other . . . . .					
<b>Total . . . . .</b>	<b>1,044,082</b>	<b>4,051,913</b>	<b>5,366,170</b>	<b>6,205,409</b>	<b>7,371,481</b>
<b>PAYMENTS.</b>					
Construction and Reconstruction of Roads and Bridges . . . . .	922,756	2492320	2,947,597	4,497,015	5,154,419
Maintenance . . . . .		214,217	255,181	309,276	292,492
Grants to Local Authorities, etc. . .	143,544	295,713	323,410	368,410	404,221
Transfer to State Consolidated Revenue . . . . .	..	70,000	70,000	70,000	75,739
Interest, Debt Redemption and Exchange—State Consolidated Revenue . . . . .	7,616	7,396	7,396	7,396	7,396
Administration . . . . .	52,176	47,583	69,947	72,354	70,000
Plant, Machinery, etc. . . . .	..	276,686	545,833	481,536	580,881
Other . . . . .	19,181	540,945	463,969	520,405	521,175
<b>Total . . . . .</b>	<b>1,145,273</b>	<b>3,944,860</b>	<b>4,683,333</b>	<b>6,326,392</b>	<b>7,106,323</b>

(a) Figures not completely comparable with those for following years. Includes Transport Co-ordination Trust Account.

7. Tasmania.—(i) *General.* Under the Road Construction (Transfer of Functions) Act 1951, which came into operation on 1st July, 1951, the control of the construction and maintenance of roads and certain road making plant was vested in the Minister for Lands and Works. Works authorized by the Minister in respect of roads classified as State highways, tourists' and developmental roads are constructed by the Department of Public Works and financed from the State Highways Trust Fund into which are paid the proceeds from Commonwealth Aid Roads grants, motor vehicle registration fees and taxes, licence fees for drivers and public transport and other moneys made available by Parliament. In addition, provision was made under the Road Construction (Transfer of Functions) Act for certain works authorized by the Transport Commission to be carried out and constructed by the Department. The expenditure by the Public Works Department during 1956-57 on the construction of roads, tracks and bridges amounted to £3,148,157 of which £2,440,258 was charged to road funds, £20,329 to revenue, £665,204 to loan and £22,366 to other funds. Except in special cases, municipal councils bear the cost of maintaining country roads and a proportion of the cost of main and secondary roads.

(ii) *Length of Roads. (a) Classified Roads.* The mileages of classified roads in Tasmania at 30th June, 1957, were as follows:—State highways, 1,161 miles; main roads, 653 miles; secondary roads, 186 miles; tourist roads, 46 miles; developmental roads, 10 miles; subsidized roads, 131 miles; total 2,187 miles. Country roads totalled more than 10,000 miles. The mileages of sealed roads, and their proportions to the respective totals, were:—State highways, 592 miles (50 per cent.); main roads, 242 miles (37 per cent.); secondary and other roads, 24 miles (6 per cent.); total, 858 miles (39 per cent. of all classified roads, and 7 per cent. of all roads, in Tasmania).

(b) *Composition of Roads.* The length of all roads in Tasmania, including those with surfaces of lower grade, at 30th June, 1957, was as follows:—Bituminous, 1,187 miles; concrete, 22 miles; granite, limestone, etc., water-bound, 8,539 miles; surfaces of lower grade, 2,926 miles; total, 12,674 miles.

(iii) *Receipts and Payments—Combined Road Funds.* The table hereunder shows particulars of the receipts and payments of the combined Road Funds for the years 1939-40 and 1953-54 to 1956-57:—

## ROAD FUNDS, TASMANIA : RECEIPTS AND PAYMENTS.

(£.)

Item.	1939-40. (a)	1953-54.	1954-55.	1955-56.	1956-57.
<b>RECEIPTS.</b>					
Motor Vehicle Taxation and Registration, Licences, Fees, Fines, etc.	193,165	450,962	523,138	623,782	840,724
Commonwealth Aid Roads and Works Acts .. .. .	220,241	830,922	1,125,259	1,303,299	1,535,719
Recoups from Local Authorities, etc. .. .. .	..	10,076	8,339	10,765	10,469
State Loan Fund .. .. .	..	825,502	860,862	782,264	679,099
Hire of Plant .. .. .	..	741,383	807,525	813,593	912,089
Other .. .. .	719	115,064	167,414	171,205	31,046
<b>Total .. .. .</b>	<b>414,125</b>	<b>2,973,909</b>	<b>3,492,537</b>	<b>3,704,908</b>	<b>4,009,146</b>
<b>PAYMENTS.</b>					
Construction and Reconstruction of Roads and Bridges .. .. .	130,924	1,070,414	1,562,003	1,624,722	1,945,053
Maintenance .. .. .	113,199	977,403	1,041,981	1,079,893	1,150,714
Jetties, etc. .. .. .	22,467	..	..	..	..
Other works connected with Transport .. .. .	5,748	9,823	10,480	11,558	7,105
Grants to Local Authorities, etc. .. .. .	..	3,671	5,018	5,401	7,346
Administration .. .. .	15,053	56,807	39,315	40,213	36,405
Purchase, Hire and Maintenance of Plant .. .. .	(b)	809,546	848,738	839,360	1,068,202
Other .. .. .	31,894	22,558	93,332	70,535	57,312
<b>Total .. .. .</b>	<b>319,285</b>	<b>2,905,106</b>	<b>3,600,867</b>	<b>3,671,682</b>	<b>4,272,137</b>

(a) First year of operation of Transport Commission. Figures not completely comparable with those for following years. (b) Not available, included with other.

NOTE.—Minus sign (—) indicates an excess of credits.

8. **Summary of Roads used for General Traffic.**—(i) *Proclaimed or Declared Roads.* The table hereunder is a summary of the roads proclaimed or declared under the Acts of the several States relative to the operations of the central road authorities, and shows the lengths of various classes proclaimed or declared as at 30th June, 1957. These proclaimed or declared roads are those for which the central road authority assumes responsibility under the Act for the whole, or a proportion, of the cost of construction and/or maintenance, the extent varying from State to State and with the class and locality of the roads. Before proclamation of a main road, consideration is given, in general, to the following points :— availability of funds ; whether the road is, or will be, within one of several classes of main trunk routes ; whether the district is, or will be, sufficiently served by railways. Provision is also made in some States for the declaration of roads other than main roads. The absence of a particular class in any State does not necessarily imply that there are no roads within that State that might be so classified; the classes are restricted only to roads proclaimed or declared under the Acts. A further point to make is that, through various causes, e.g., insufficiency of funds, man-power or materials, etc., construction or maintenance may not keep pace with gazettals of mileages, and therefore the condition of a road may not match its status.

**PROCLAIMED OR DECLARED ROADS : LENGTHS, 30th JUNE, 1958.**  
(Miles.)

Class of Road.	N.S.W.	Vic.	Q'land. (a)	S Aust.	W. Aust. (a)	Tas. (a)	Total.
State highways .. ..	6,508	3,845	8,246	} 8,188	3,487	} 1,161 653	} 68,414
Trunk roads .. ..	4,180	} 9,754	10,636				
Ordinary main roads .. ..	11,756						
<b>Total Main Roads .. ..</b>	<b>22,444</b>	<b>13,599</b>	<b>18,882</b>	<b>8,188</b>	<b>3,487</b>	<b>1,814</b>	<b>68,414</b>
Secondary roads .. ..	82	..	646	..	6,929	186	7,843
Developmental roads .. ..	2,698	..	235	..	13,702	10	16,645
Tourist roads .. ..	..	415	298	..	..	46	759
Other roads .. ..	..	(b) 378	(c) 914	..	..	(d) 131	1,423
<b>Total Other Roads .. ..</b>	<b>2,780</b>	<b>793</b>	<b>2,093</b>	<b>..</b>	<b>20,631</b>	<b>373</b>	<b>26,670</b>
<b>Grand Total .. ..</b>	<b>25,224</b>	<b>14,392</b>	<b>20,975</b>	<b>8,188</b>	<b>24,118</b>	<b>2,187</b>	<b>95,084</b>

(a) As at 30th June, 1957. (b) Forest roads. (c) Includes mining access roads, 606 miles; farmers' roads, 311 miles; tourist tracks, 1 mile. (d) Subsidized roads.

(ii) *Composition of Roads.* The following table represents an attempt to classify all the roads used for general traffic in Australia, at the latest dates available, according to States and Territories and to certain broad composition groups. The results are not entirely satisfactory, (i) because it is doubtful whether the whole of Australia is covered, (ii) because the dates of reference differ, and (iii) because the figures constituting each group are not wholly comparable for the States and Territories. It is hoped, however, that despite these defects the table will provide an approximate and general idea of the main types of roads in Australia.

The figures in the table for the States are obtained from the State Government Statisticians, and are derived mainly from local government sources. Unincorporated areas in some States are probably excluded and the figures on the returns supplied by the local government authorities are in some cases of doubtful accuracy. Details of the composition of roads, as far as they are available, vary to such an extent that it is considered preferable to show here only major divisions.

Groups 1-4 as shown in the table include, respectively, the following types of composition :—

1. *Wood or Stone.* Wood blocks ; stone paved.
2. *Concrete.* Cement concrete ; asphaltic concrete ; bituminous concrete ; sheet asphalt on concrete base.
3. *Bituminous.* Tar or bituminous macadam ; tar and bituminous surface seal ; surfaced water-bound macadam or gravel ; bituminous or cement penetration.

4. *Macadam and Other.* Water-bound macadam ; granite, limestone, and blast-furnace slag, water-bound ; water-bound gravel ; gravel or crushed rock ; metalled (gravel or rubble) ; gravel, sand and hard loam pavements.

Groups 5 and 6 include roads so-called mainly because they are used for general traffic, irrespective of their surfaces, prepared or otherwise.

It will be noticed that some of the terms used above are practically synonymous. Such terms are, of course, not used by any one State, but are the classifications adopted by different States.

For details of any particular State, see the respective paragraphs in the preceding pages.

### ALL ROADS USED FOR GENERAL TRAFFIC : LENGTHS.

(Miles.)

Composition of Road.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	A.C.T.	Total.
	30th June, 1957.	30th Sept., 1954.	30th June, 1957.	30th June, 1953.	1957. (a)	30th June, 1957.	30th June, 1957.	30th June, 1957.	
1. Wood or stone ..		61		6					67
2. Concrete ..	635	368	208	605		22		3	1,841
3. Bituminous	15,105	12,197	6,921	2,914	6,487	1,187	1,293	201	46,305
4. Macadam and other	42,522	31,766	17,465	16,829	16,940	8,539	192	188	134,441
5. Formed only	27,604	25,040	35,015	12,956	39,042		8,542	197	
6. Cleared, or natural surface, only	41,231	30,531	61,248	22,270	26,216	2,926	2,100	20	334,938
<b>Total ..</b>	<b>127,097</b>	<b>99,963</b>	<b>120,857</b>	<b>55,580</b>	<b>88,685</b>	<b>12,674</b>	<b>12,127</b>	<b>609</b>	<b>517,592</b>

(a) Municipalities, 31st October; Road Districts, 30th Jun .

9. *Summary of Expenditure on Roads and Bridges.*—(i) *General.* In most States, there are three classes of authorities—the State Government, the central road authority, and numerous local government bodies. Most of these authorities may expend money either directly on road construction or indirectly by means of grants and miscellaneous payments to other authorities. Insufficient information is given in the accounts of many authorities to permit the exclusion of these indirect payments which would, if included in the aggregate, duplicate the expenditure. In addition, a number of authorities are not able to supply separate information concerning their expenditure on roads. For these reasons, it has not been possible, up to the present, to compile statistics of the aggregate expenditure on roads.

The two paragraphs following therefore represent only : (a) aggregate expenditure from the various State road funds referred to in the foregoing pages, and (b) loan fund expenditure by State Governments. Expenditure by local government bodies is not included. Paragraph 8, Finances, of § 2. Local Government Authorities, contains some particulars of local government revenue and expenditure on roads, streets and bridges (see pages 690 and 693).

(ii) *Aggregate Expenditure from State Road Funds.* The following table shows expenditure on the construction and maintenance of roads, including payments to local government bodies, by each State during the years 1938–39 and 1952–53 to 1956–57, as summarized from the foregoing tables dealing with the receipts and payments of the various State road authorities. Expenditure on plant and materials, not charged to construction and maintenance of roads and bridges and expenditure on debt charges and payments to State consolidated revenues are not included. In some instances, expenditure on works other than roads and bridges is included. Because of differing accounting methods, figures are not completely comparable as between States, nor, in some States, as from year to year.

**ROADS AND BRIDGES : AGGREGATE EXPENDITURE FROM ROAD FUNDS.**  
(£'000.)

Year ended 30th June—	N.S.W.(a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
1939.. ..	3,358	2,569	2,557	1,150	1,138	(b) 319	11,091
1953.. ..	9,357	6,472	5,979	3,404	4,320	1,683	31,215
1954.. ..	11,972	7,237	6,235	4,708	3,591	2,096	35,839
1955.. ..	12,938	9,131	8,975	5,256	4,060	2,752	43,112
1956.. ..	13,679	10,659	9,772	6,145	5,768	2,832	48,855
1957.. ..	14,603	12,442	11,349	6,109	6,442	3,204	54,149

(a) Excludes Sydney Harbour Bridge.

(b) Year 1939-40.

The foregoing particulars do not represent the total expenditure on roads and bridges in each State. To obtain this information, additions must be made on account of (a) State Government expenditure from revenue and loan through Departments or authorities other than the central road authority and (b) local government expenditure from revenue and loan, while, on the other hand, allowances must be made for grants and miscellaneous payments to other authorities (see (i) above).

(iii) *State Net Loan Expenditure.* In recent years, expenditure from State loan funds on roads and bridges has not been large, and it would appear, also, that a considerable proportion passes through the funds of the central road authorities and is therefore included in the figures of their financial operations in the foregoing sections. Gross loan expenditure by all State Governments during 1956-57 amounted to less than £1,250,000, while net expenditure was about £400,000 less. Aggregate net loan expenditure on roads and bridges in each State to 30th June, 1957, amounted to the following approximate sums :—New South Wales, £22,000,000 ; Victoria, £21,000,000 ; Queensland, £10,000,000 ; South Australia, £5,000,000 ; Western Australia, £3,000,000 ; Tasmania, £10,000,000 ; total, £71,000,000.

### § 5. Water Supply, Sewerage and Drainage.

NOTE.—See also Chapter VIII.—Water Conservation and Irrigation.

1. New South Wales.—(i) *General.* The two largest domestic water supply and sewerage systems are controlled by statutory boards each consisting of a president and a vice-president appointed by the State Government and five members elected by local councils. These are (a) the Metropolitan Water, Sewerage and Drainage Board, which administers the systems in the County of Cumberland, i.e., in Sydney and in the surrounding districts, and, in addition, has jurisdiction over territory extending along the South Coast beyond Wollongong to Lake Illawarra, and (b) the Hunter District Water Board, serving the Newcastle area. At Broken Hill, a similar board includes a representative of the mining companies. Other systems, apart from irrigation projects and water storage systems administered by the State Government, are controlled by county, municipal or shire councils.

(ii) *Water Supply—to 30th June, 1957.* (a) *Metropolitan.* The storage reservoirs of the metropolitan system, with a combined available capacity of 125,788 million gallons, drain catchment areas of 376 square miles (Upper Nepean, 347 square miles and Woronora, 29 square miles). Water is drawn also from the Warragamba River, with a catchment of 3,383 square miles. This system is being developed, and building is in progress of a dam to have an overall height of 415 feet (greatest depth of water 340 feet) having a storage capacity of 460,000 million gallons and giving a net safe draught estimated at 263 million gallons a day in addition to 11 million gallons a day for riparian purposes. The existing temporary storage is supplied by a weir 50 feet high with a maximum storage of 579 million gallons. At 30th June, 1957, there were 121 service reservoirs in use with a combined capacity of 546 million gallons. Rating for water for 1956-57 was 10d. in the £1 of assessed annual value and the charge for water measured by meters 2s. 3d. per 1,000 gallons.

(b). *Newcastle*. The water supply is drawn from two sources (1) the Chichester Reservoir, with a storage capacity of about 5,000 million gallons and draining a catchment of 76 square miles, and (2) the Tomago Sandbeds, which extend northerly along the coast towards Port Stephens. Service reservoirs and tanks distributed throughout the Water Supply District have a total storage capacity of 113 million gallons. Water rating for 1956-57 was 1s. 6½d. in the £1 on assessed annual value for occupied properties and 1s. 3½d. in the £1 for unoccupied properties. The price of water to domestic and industrial consumers is 2s. 6d. per 1,000 gallons.

(c) *Water Supplied, etc.* The following tables show, for the Sydney and Newcastle systems, the number of properties, the estimated population supplied, and other details for the years 1938-39 and 1952-53 to 1956-57 :—

WATER SUPPLY, SYDNEY(a) : SERVICES.

Year.	Improved Properties for which Water Mains available.	Estimated Population Supplied.	Average Daily Consumption.	Total Consumption for the Year.	Average Daily Consumption.		Length of Mains.	Number of Meters.
					Per Property.	Per Head of Estimated Population.		
1938-39 ..	350,161	1,466,000	Mill. gals. 106.3	Mill. gals. 38,790	Gallons. 304	Gallons. 72.5	Miles. 4,539	126,754
1952-53 ..	478,598	1,958,000	149.6	54,621	313	76.4	5,357	246,383
1953-54 ..	496,025	1,975,000	163.9	59,810	330	83.7	5,502	270,239
1954-55 ..	513,855	2,014,000	161.8	59,064	315	80.4	5,656	294,463
1955-56 ..	531,977	2,053,000	174.3	63,791	332	85.6	5,788	308,511
1956-57 ..	545,992	2,096,000	196.0	71,530	364	94.1	5,904	326,173

(a) Includes part of South Coast.

WATER SUPPLY, NEWCASTLE : SERVICES.

Year.	Properties Supplied.	Estimated Population Supplied.	Average Daily Consumption.	Total Consumption for Year.	Average Daily Consumption.		Length of Mains.
					Per Property.	Per Head of Estimated Population.	
1938-39.. ..	48,370	193,480	Mill. gals. 11.9	Mill. gals. 4,331	Gallons. 245	Gallons. 61.3	Miles. 936
1952-53.. ..	69,244	276,976	23.9	8,719	345	86.3	1,262
1953-54.. ..	71,307	285,228	25.5	9,416	362	90.4	1,284
1954-55.. ..	73,770	295,080	25.1	9,179	341	85.2	1,322
1955-56.. ..	76,272	305,088	27.2	9,945	356	89.1	1,354
1956-57.. ..	77,380	309,520	29.5	10,768	381	95.3	1,369

(iii) *Sewerage and Drainage—to 30th June, 1957.* (a) *Metropolitan.* Sydney and suburbs are served by 3 major sewerage systems and 5 minor systems consisting of 6 outfalls discharging direct into the Pacific Ocean and 2 treatment works. A further treatment works is in course of construction near Kurnell and is designed to serve the whole of the Cronulla Peninsula. In addition, 4 centres outside the metropolitan area (Camden, Campbelltown, Liverpool and Wollongong) are served by local treatment works.

Stormwater drainage channels under the control of the Metropolitan Water, Sewerage and Drainage Board at 30th June, 1957, were 175 miles long. Sewerage rating for 1956-57 was 9½d. in the £1 of assessed annual value and drainage rating 1½d. in the £1.

(b) *Newcastle.* The main sewerage system of the Newcastle area discharges into the Pacific Ocean at Merewether Gulf. In some of the outlying districts, treatment works have been installed.

Sewerage rates for 1956-57 were 1s. 1½d. in the £1 of assessed annual value of occupied lands and 10½d. in the £1 for unoccupied lands and drainage rates (on certain areas served) 1½d. in the £1.

(c) *Particulars of Services.* The following table gives, for the Metropolitan system, details of sewerage services and stormwater drains as at 30th June, 1939 and 1953 to 1957.

**SEWERAGE AND DRAINAGE, METROPOLITAN(a) : SERVICES.**

At 30th June—				Improved Properties for which Sewerage Available.	Estimated Population Served.	Lengths of Sewers.	Length of Stormwater Channels.
						Miles.	Miles.
1939	..	..	..	254,632	1,066,000	2,561	87
1953	..	..	..	316,439	1,293,000	3,055	174
1954	..	..	..	324,737	1,354,000	3,163	175
1955	..	..	..	334,280	1,390,000	3,252	175
1956	..	..	..	344,655	1,425,000	3,349	175
1957	..	..	..	353,800	1,457,000	3,462	175

(a) Includes part of South Coast.

At 30th June, 1957, 51,101 premises had been connected to the Hunter District Water Board's sewerage system (Newcastle area). The total length of sewers under the Board's control was 677 miles, and the length of drains was 49 miles.

(iv) *Finances, Sydney and Newcastle Systems.* The following table shows the debt, revenue and expenditure of the Metropolitan Water, Sewerage and Drainage Board and the Hunter District Water Board for each of the services of water supply, sewerage and drainage during 1956-57 and for the three services combined during the years 1938-39 and 1952-53 to 1956-57.

**WATER SUPPLY, SEWERAGE AND DRAINAGE, METROPOLITAN AND NEWCASTLE : FINANCES.**

(£.)

Year.	Capital Debt at 30th June.	Revenue.	Expenditure.				Surplus (+) or Deficit(-).
			Working Expenses (a)	Interest and Exchange.	Debt Redemption.	Total.	
<b>METROPOLITAN.(b)</b>							
1956-57—							
Water ..	74,377,054	7,115,087	3,276,904	2,756,120	1,079,681	7,112,705	+ 2,382
Sewerage ..	29,880,190	3,926,710	2,378,998	1,106,144	439,684	3,924,826	+ 1,884
Drainage ..	c 1,370,460	257,566	197,863	36,823	21,047	255,733	+ 1,833
Total 1956-57	105,627,704	11,299,363	5,853,765	3,899,087	1,540,412	11,293,264	+ 6,099
1955-56	98,801,814	9,349,410	4,851,588	3,446,598	1,044,103	9,342,289	+ 7,121
1954-55	91,434,271	8,507,664	4,732,625	3,109,747	641,164	8,483,536	+ 24,128
1953-54	84,474,951	7,891,016	4,365,926	2,878,004	598,634	7,842,564	+ 48,452
1952-53	77,117,666	6,672,577	3,494,464	2,618,630	554,435	6,667,529	+ 5,048
1938-39	43,769,741	2,926,694	957,422	1,727,708	241,564	2,926,694	..
<b>NEWCASTLE.</b>							
1956-57—							
Water ..	10,846,725	1,224,070	680,779	393,359	144,071	1,218,209	+ 5,861
Sewerage ..	3,549,841	452,922	284,992	120,732	47,922	453,646	- 724
Drainage ..	205,668	32,869	24,099	7,121	2,725	33,945	- 1,076
Total 1956-57	14,602,234	1,709,861	989,870	521,212	194,718	1,705,800	+ 4,061
1955-56	13,175,757	1,534,591	981,473	435,203	82,767	1,499,443	+ 35,148
1954-55	11,842,265	1,465,655	943,382	382,663	73,330	1,399,375	+ 66,280
1953-54	10,439,017	1,245,444	828,021	332,628	66,407	1,227,056	+ 18,388
1952-53	9,431,369	1,119,775	726,137	294,769	59,747	1,080,653	+ 39,122
1938-39	4,574,880	385,732	167,620	188,185	20,886	376,691	+ 9,041

(a) Includes provision for renewals, long service leave, loss on exchange, etc. (b) Includes part of South Coast. (c) Excludes non-interest bearing capital in respect of stormwater drains transferred from Public Works Department—£2,219,823 at 30th June, 1957.

(v) *Country Water Supply and Sewerage Systems.* At 31st December, 1955, country water supply services were conducted or under construction by 60 municipalities, 69 shires and 4 county councils, and country sewerage services by 55 municipalities and 21 shires. The capital indebtedness of these schemes was £19,927,514 at 31st December, 1955, namely, £14,222,549 for water and £5,704,965 for sewerage. Debt of the municipalities amounted to £10,646,749, shires to £5,310,706 and county councils to £3,970,059. Government advances amounting to £474,410 are included in these figures. Aggregate income and expenditure amounted to £3,211,000 and £2,362,000, respectively, in 1955.

(vi) *Other Water Supply and Sewerage Systems.* The water supply and sewerage services for Broken Hill are operated by a statutory board, the Broken Hill Water Board. Its capital indebtedness at 31st December, 1956, was £3,070,531. In 1956, income (excluding subsidies, State Government £100,644 and Mining Companies £290,958) amounted to £189,121 and expenditure (excluding debt redemption £157,748) amounted to £421,513.

The following country water supply systems—South-West Tablelands, Junee and Fish River—are administered by the Department of Public Works. These supply water in bulk to municipalities and shires, the Railways Department, and other large consumers. Only a small quantity is sold directly to private consumers. The capital indebtedness of these systems was £4,711,162 at 31st December, 1957.

The Mulwala Water Supply and Sewerage Service was constructed as an urgent war-time work for the Commonwealth, and the Bethungra Water Supply System is administered by the Department of Public Works in conjunction with the Junee supply.

## 2. Victoria.—(i) *Melbourne and Metropolitan Board of Works.* (a) *General.*

The Board was established by Act of Parliament on 20th December, 1890. Since August, 1955, the Board has consisted of a Chairman and 50 Commissioners elected to represent the municipalities which lie wholly or partly within the metropolitan area. The Chairman is elected by the Commissioners for a four-year term. The principal functions of the Board until 1954 were to control and manage the metropolitan water supply system; to provide the metropolitan area with an efficient main and general sewerage; to deal with main drains and main drainage works; and to control and manage the rivers, creeks and watercourses within the metropolitan area. The Board has carried out since December, 1954, the additional functions of a permanent planning authority and in June, 1956, it became the authority directly responsible for metropolitan main highways, bridges, parks and foreshores.

(b) *Water Supply.* There are six storage reservoirs serving the metropolitan area—Yan Yean, 7,234 million gallons (available for consumption, 6,649 million gallons); Toorourrong, 60 million gallons; Maroondah, 6,289 million gallons (4,870 million gallons); O'Shannassy, 930 million gallons; Silvan, 8,853 million gallons (8,823 million gallons); and Upper Yarra, 45,400 million gallons (44,120 million gallons); total, 68,766 million gallons (65,452 million gallons). Service reservoirs number 29, with a total capacity of 317 million gallons.

The water rate levied by the Board in 1956–57 was 8d. in the £1 on the net annual value of the properties served. The charge for water consumed in excess of the quantity which at 1s. per 1,000 gallons would equal the water rates payable on each property was 1s. 6d. per 1,000 gallons. The following table shows particulars of Melbourne metropolitan water supply services for the years 1938–39 and 1952–53 to 1956–57.

## WATER SUPPLY, MELBOURNE : SERVICES.

Year.	Number of Houses Supplied.	Estimated Population Supplied.	Average Daily Consumption.	Total Consumption for the Year.	Average Daily Consumption.		Length of Aqueducts, etc., Mains and Reticulation.	Number of Meters.
					Per House.	Per Head of Estimated Population.		
			Mill. gals.	Mill. gals.	Gallons.	Gallons.	Miles.	
1938-39 ..	285,408	1,133,000	76.8	28,040	269	67.8	3,234	189,617
1952-53 ..	378,439	1,382,000	102.4	37,383	271	74.1	4,134	264,916
1953-54 ..	390,035	1,404,000	110.6	40,354	283	78.8	4,213	266,395
1954-55 ..	405,464	1,460,000	110.3	40,270	272	75.6	4,300	273,856
1955-56 ..	424,500	1,528,000	113.0	41,377	266	74.0	4,381	289,567
1956-57 ..	440,159	1,585,000	119.6	43,652	271	75.4	4,478	299,676

(c) *Sewerage and Drainage.* Particulars of sewerage and drainage services for 1938-39 and 1952-53 to 1956-57 are shown below. The rate levied in 1956-57 in respect of sewerage was 1s. 2d. in the £1 on the net annual value of the property served. The drainage rate was 2d. in the £1.

## SEWERAGE AND DRAINAGE, MELBOURNE : SERVICES.

Year.	Number of Houses for which Sewers are Provided.	Estimated Population for which Sewers are Provided.	Average Daily Pumping.	Total Sewage Pumped for the Year.	Average Daily Pumping.		Length of Sewers, etc.	Length of Main Drains.
					Per House.	Per Head of Estimated Population.		
			Mill. gals.	Mill. gals.	Gallons.	Gallons.	Miles.	Miles.
1938-39 ..	269,411	1,070,000	48.2	17,601	179.0	45.1	2,586	97
1952-53 ..	338,314	1,236,000	73.1	26,692	216.1	59.2	2,989	131
1953-54 ..	345,370	1,243,000	70.1	25,599	203.1	56.4	3,019	134
1954-55 ..	351,617	1,266,000	74.8	27,315	212.8	59.1	3,071	137
1955-56 ..	358,805	1,292,000	76.8	28,118	214.1	59.4	3,125	151
1956-57 ..	366,507	1,319,000	74.5	27,181	203.2	56.5	3,180	161

The metropolitan sewerage system consists of the Main system (serving an area of 73,162 acres) and three subsidiary systems—the Sunshine system (serving an area of 1,634 acres), the Kew system (serving an area of 103 acres) and the South-eastern system (serving an area of 2,616 acres in Cheltenham, Parkdale, Mentone and Mordialloc). The Metropolitan Sewage Farm, 26,854 acres in extent and situated about 24 miles south-west of Melbourne beyond the township of Werribee, serves to purify and dispose of approximately 95 per cent. of the sewage flow of the metropolis before its discharge into Port Phillip Bay. The total capital cost (less depreciation) of the Farm to 30th June, 1957, was £3,216,627. Revenue during 1956-57 amounted to £160,346, cost of sewage disposal to £206,984, trading expenses to £104,581, interest to £136,477, and net cost of sewerage purification to £287,696. These financial particulars are included in the sewerage items of the summary below.

(d) *Finances.* The following table provides for the year 1956-57 a summary of the financial operations of the three services conducted by the Melbourne and Metropolitan Board of Works.

MELBOURNE AND METROPOLITAN BOARD OF WORKS : FINANCES, 1956-57.  
(£.)

Service, etc.	Capital Cost of Works and Buildings at 30th June.(a)	Revenue.	Expenditure.				Surplus(+) or Deficit(-).
			Working Expenses.	Interest and Exchange.	Debt Redemption.	Total.	
Water .. ..	37,254,115	2,729,133	1,195,055	1,492,980	..	2,688,035	+ 41,098
Sewerage.. ..	25,905,135	3,060,165	1,229,051	1,084,890	..	2,313,941	+ 746,224
Drainage.. ..	5,849,842	452,216	322,416	183,321	..	505,737	- 53,521
General(b)	3,064,938	..	477,565	90,000	149,139	716,704	- 716,704
Total .. ..	72,074,030	6,241,514	3,224,087	2,851,191	149,139	6,224,417	+ 17,097

(a) Total loan indebtedness—1956-57, £59,655,685.

(b) Statutory and general expenditure not distributed over Services.

The following table shows the financial operations of the Melbourne and Metropolitan Board of Works (all services combined) for the years 1938-39 and 1952-53 to 1956-57 :—

MELBOURNE AND METROPOLITAN BOARD OF WORKS : FINANCES.  
(£.)

Year.	Capital Cost of Works and Buildings at 30th June.	Revenue.	Expenditure.				Surplus(+) or Deficit(-).
			Working Expenses.	Interest and Exchange.	Debt Redemption.	Total.	
1938-39 .. ..	28,513,539	2,214,295	762,558	1,316,603	64,269	2,143,430	+ 70,865
1952-53 .. ..	48,162,372	3,862,048	2,230,431	1,691,613	101,564	4,023,608	- 161,560
1953-54 .. ..	52,068,617	4,712,533	2,384,131	2,010,730	106,796	4,501,657	+ 210,876
1954-55 .. ..	57,747,795	5,091,108	2,744,555	2,211,592	123,977	5,080,124	+ 10,984
1955-56 .. ..	64,557,489	5,603,803	2,899,891	2,566,587	132,466	5,598,944	+ 4,859
1956-57 .. ..	72,074,030	6,241,514	3,224,087	2,851,191	149,139	6,224,417	+ 17,097

(ii) *Geelong Waterworks and Sewerage Trust.* (a) *General.* The Geelong Waterworks and Sewerage Trust was constituted in 1908 and reconstituted under the Geelong Waterworks and Sewerage Act in 1910. It was further reconstituted in September, 1950, to include a Government nominee (Chairman) and provision was made for a commissioner to be elected by the ratepayers of the Shire of Corio, making a total of seven commissioners instead of five as formerly. The amount of loan money which may be raised is limited to £6,500,000 for water supply undertakings, and £1,250,000 for sewerage undertakings. The population supplied is estimated by the Trust at 89,500. This and other general information relates to 30th June, 1957.

(b) *Water Supply.* The catchment area is about 32,000 acres. There are seven storage reservoirs and eleven service basins whose total storage capacity is 8,640 million gallons. The length of water mains and reticulation is 423 miles. The total expenditure on water supply to 30th June, 1957, was £2,999,074. Expenditure for 1956-57 comprised £106,152 for working expenses and £151,772 for interest, redemption and reserves, while revenue amounted to £260,393. The sinking fund appropriations at June, 1957, amounted to £176,714. The replacement and contingencies reserve amounted to £267,019. There is a water rate of 1s. 3d. in the £1 (with minima of 10s. for vacant land and £1 for tenements) on the net annual value of ratable properties.

(c) *Sewerage Works.* The sewerage scheme consists of a main outfall sewer to the ocean at Black Rock, about 9 miles from Geelong, and 193 miles of main and reticulation sewers. The sewerage area is 10,559 acres, and the number of buildings within the sewered areas is 17,800, of which 17,716 have been connected. The total expenditure on sewerage works to 30th June, 1957, was £1,156,563. The revenue in 1956-57 amounted to £149,605 and the expenditure comprised £68,649 on working expenses and £67,474 on interest, redemption and reserves. Sinking fund appropriations at June, 1957, were £140,335.

Replacement and contingencies reserve amounted to £253,417. A general rate of 1s. 4d. in the £1 is levied on the net annual value of ratable properties.

(iii) *The Ballarat Water Commission and the Ballarat Sewerage Authority.* (a) *General.* The Ballarat Water Commission was constituted on 1st July, 1880, and the Ballarat Sewerage Authority on 30th November, 1920. The members of the Water Commission constitute the Sewerage Authority. The Commissioners number nine, three (one of whom is chairman) being appointed by the Government, four being elected by the Council of the City of Ballarat, one being elected by the Councils of the Borough of Sebastopol and the Shires of Buninyong and Grenville and one being elected by the Councils of the Shires of Bungaree and Ballarat. General and financial information given herein relates to the year ended 31st December, 1957.

(b) *Water Supply.* The Water Supply District embraces an area of about 65 square miles, containing a population of about 53,000. The total storage capacity of the seven reservoirs is 5,605 million gallons and the catchment area is 22,562 acres.

The capital cost of construction of the waterworks was £2,176,460 to 31st December, 1957. The liabilities amounted to £1,240,980 at 31st December, 1957, including loans due to the Government totalling £1,142,960. The revenue for the year 1957, was £158,296. Working expenses during 1957 amounted to £80,948 and interest and other charges to £74,078. A rate of 1s. 1d. in the £1 is levied on the net annual value of all ratable properties, with a minimum of £1 per annum for land on which there is a building or water supply.

(c) *Sewerage.* The Ballarat sewerage district embraces the City of Ballarat and parts of the Shires of Ballarat and Bungaree and the Borough of Sebastopol. Work was commenced in 1922 and up to 31st December, 1957, the Authority had constructed a disposals works, a nightsoil depot, an ejector station and more than 111 miles of sewers. The capital cost of sewerage construction works to 31st December, 1957, was £808,598. The method of sewage disposal is by sedimentation, oxidation and sludge digestion. One hundred and sixty-two sewered areas had been declared as at 31st December, 1957. Assessments in the sewerage district numbered 15,998, while those in sewered areas numbered 12,444. There were 10,929 buildings connected.

The scheme is financed by debenture-issue loans from various financial institutions. The liabilities on account of loans secured for construction at 31st December, 1957, amounted to £648,598; redemption payments at that date totalled £247,975. An expenditure of £157,122 was incurred for house connexions, the whole of which has been redeemed. Revenue during 1957 amounted to £84,078 and expenditure, which included £42,658 on interest and redemption, was £85,068.

A sewerage rate of 1s. 4d. in the £1 is levied, with a minimum charge of £2 4s., on the net annual value of any ratable sewered property on which there is a building and £1 on any ratable sewered property on which there is no building.

(iv) *Other Sewerage Authorities.* At 30th June, 1957, 63 sewerage authorities had been constituted under the provisions of the Sewerage Districts Acts in districts outside the areas under the control of the Melbourne and Metropolitan Board of Works, the Geelong Waterworks and Sewerage Trust, and the Ballarat Sewerage Authority, and systems were in operation in 35 districts (including two partly operating) serving a population of 340,000 persons.

The operations of the other 28 districts constituted at this date had either been suspended or not commenced.

(v) *Water Supply in Country Towns and Districts.* Most of the country waterworks are controlled by the State Rivers and Water Supply Commission, but in some instances the control is by waterworks trusts or by municipal corporations.

The waterworks controlled by the State Rivers and Water Supply Commission at 30th June, 1957, included 38 large reservoirs and 246 subsidiary reservoirs and service basins with a total storage capacity of 1,351,050 million gallons (4,962,550 acre feet). Length of channels was 15,332 miles (irrigation, 5,073 miles, domestic and stock 8,012 miles, drainage and flood protection, 2,247 miles) and of pipe lines 1,278 miles. The quantity of water delivered to water users during 1956-57 was 1,139,373 acre feet which was the highest figure ever recorded. The Commission administered 65 rural districts during 1956-57 (29 irrigation districts, 31 waterworks districts, 4 flood protection districts and 1 drainage district), and the reticulated pipe supplies for domestic and industrial purposes in 130 urban districts. In addition, 137 urban districts were administered by waterworks trusts and 21 by local governing bodies. The population served in these groups of urban districts numbered, respectively, 207,970, 380,950 and 114,880 persons. The table below is a summary of the Commission's finances for operations in districts under its control for the years 1938-39 and 1952-53 to 1956-57.

STATE RIVERS AND WATER SUPPLY COMMISSION, VICTORIA : FINANCES.(a)  
(£.)

Year.	Total Loan Capital Expenditure to 30th June.	Receipts.	Payments.				Total.
			Operating Expenses.	Interest on Capital Allotted.	Depreciation.	Debt Redemption.	
1938-39 ..	24,223,037	560,680	476,085	145,105	27,553	4,922	653,665
1952-53 ..	57,464,776	1,989,289	2,669,419	26,555	90,024	3,284	2,789,282
1953-54 ..	65,143,250	2,412,382	2,717,862	75,101	90,616	5,181	2,888,760
1954-55 ..	73,456,588	2,532,946	2,781,621	95,335	120,475	2,465	2,999,896
1955-56 ..	79,847,923	2,810,391	2,940,637	118,379	127,774	5,491	3,192,281
1956-57 ..	85,705,533	2,874,904	3,194,160	130,621	134,101	3,750	3,462,632

(a) Excludes waterworks and river improvement trusts and local governing bodies under the general supervision of the Commission.

The total loan capital expenditure of waterworks and river improvement trusts and local governing bodies to 30th June, 1957, was £11,875,701, making a grand total of £97,581,234 when added to the figure for works under the control of the Commission. The net loan capital after redemption payments of £3,602,581 was £93,978,652.

The financial operations of the State Rivers and Water Supply Commission form part of the Consolidated Revenue Fund, but are included in this section for convenience. The major proportion of the interest payable is borne by the State and is additional to that shown above. The net expenditure borne by the State during 1956-57 was £3,868,507.

3. Queensland.—(i) *Brisbane City Council—to 30th June, 1957.* (a) *General.* This organization conducts the water supply and sewerage systems of the City of Brisbane. Prior to 1928, water and sewerage activities had been controlled by the Metropolitan Water and Sewerage Board, but were then absorbed by the Brisbane City Council, which also supplies, in bulk, the whole of the water used by the City of Ipswich and the Town of Redcliffe.

(b) *Water Supply.* Water storage facilities comprise the following (available capacities are shown in parentheses) :—Somerset Reservoir, 200,000 million gallons (55,000 million gallons) ; Lake Manchester, 5,806 million gallons (5,725 million gallons) ; Brisbane River, 543 million gallons (484 million gallons) ; Pure Water Reservoir, Holt's Hill, 8.3 million gallons (8.3 million gallons) ; Enoggera Reservoir, 1,000 million gallons (600 million gallons) ; Gold Creek Reservoir, 407 million gallons (400 million gallons). There are sixteen service reservoirs with a capacity of approximately 41 million gallons. The Somerset reservoir is under the control of Stanley River Works Board and is a dual purpose project with a designed total holding capacity of 200,000 million gallons, 55,000 million gallons to be for water storage and 145,000 million gallons for flood mitigation. Water rating at 30th June, 1957, was 3½d. in the £1 of unimproved capital value for improved properties, and 2½d. in the £1 for vacant lands, with a minimum charge of £5 9s. and £4 5s. respectively. The following table is a summary of operations of the complete Brisbane City Council system (metropolitan area, Ipswich and Redcliffe) for the years 1938-39 and 1952-53 to 1956-57 :—

WATER SUPPLY, BRISBANE(a) : SERVICES.

Year.	Services Connected.	Estimated Population Supplied.	Average Daily Consumption.	Total Consumption for the Year.	Average Daily Consumption.		Length of Trunk and Reticulation Mains.	Number of Meters.
					Per Service.	Per Head of Estimated Population.		
					Gallons.	Gallons.		
1938-39 ..	81,389	345,903	Mill. gals. 15.9	Mill. gals. 5,791	195	45.9	Miles. 1,169	(b)
1952-53 ..	131,895	501,000	31.5	11,486	239	61.0	1,760	52,360
1953-54 ..	139,172	520,000	33.9	12,379	244	62.3	1,817	51,976
1954-55 ..	144,459	530,000	34.1	12,458	236	64.3	1,870	51,138
1955-56 ..	148,632	543,000	36.4	13,283	245	67.0	1,929	49,588
1956-57 ..	153,035	560,000	41.1	15,012	269	73.5	1,959	(b)

(a) Includes Ipswich and Redcliffe.

(b) Not available.

(c) *Sewerage.* The sewage treatment works is situated at Luggage Point at the entrance to the Brisbane River. An activated sludge system of treatment was originally planned but, since the commencement of pumping operations, a sedimentation plant only has been used. Sewerage rating at 30th June, 1957, was 2½d. in the £1 of unimproved capital value for improved properties, and 2½d. in the £1 for vacant lands, with a minimum charge of £6 6s. and £5 6s. respectively. The following table is a summary of operations of the Brisbane sewerage scheme for the years 1938-39 and 1952-53 to 1956-57:—

## SEWERAGE, BRISBANE : SERVICES.

Year.					Premises Connected.	Estimated Population Served.	Total Sewage Pumped for the Year.	Length of Main, Branch, Reticulation etc., Sewers.
							Mill. Galls. (a)	Miles.
1938-39	..	..	..	..	33,200	150,000		484
1952-53	..	..	..	..	47,500	182,000	4,791	630
1953-54	..	..	..	..	48,700	183,000	4,868	647
1954-55	..	..	..	..	50,400	187,000	4,944	665
1955-56	..	..	..	..	53,100	196,000	6,222	696
1956-57	..	..	..	..	54,300	201,000	4,837	712

(a) Not available.

(d) *Finances.* The following table shows particulars of the finances of the water supply and sewerage undertakings of the Brisbane City Council for the years 1938-39 and 1952-53 to 1956-57:—

## WATER SUPPLY AND SEWERAGE, BRISBANE : FINANCES.

(£.)

Service and Year.	Gross Capital Cost to 30th June.	Revenue.	Expenditure.			Surplus(+) or Deficit(-).
			Working Expenses.	Interest, Redemption, etc. Charges.	Total.	
<b>Water Supply—</b>						
1938-39 ..	4,849,732	606,244	129,219	280,827	422,366	+ 183,878
1952-53 ..	9,861,885	1,280,390	587,695	403,349	1,164,278	+ 116,112
1953-54 ..	10,672,306	1,326,644	640,838	434,073	1,237,040	+ 89,604
1954-55 ..	12,248,875	1,296,624	697,625	492,951	1,275,644	+ 20,980
1955-56 ..	12,618,584	1,479,045	765,970	549,707	1,459,738	+ 19,307
1956-57 ..	13,159,492	1,634,624	810,150	564,708	1,610,117	+ 24,507
<b>Sewerage—</b>						
1938-39 ..	5,992,936	240,963	52,792	403,386	485,974	- 245,011
1952-53 ..	10,863,167	591,584	171,614	330,642	564,704	+ 26,880
1953-54 ..	11,898,902	603,141	163,397	349,692	552,651	+ 50,490
1954-55 ..	12,705,307	578,257	166,609	391,744	628,081	- 49,824
1955-56 ..	13,125,463	719,623	217,238	408,917	707,476	+ 12,147
1956-57 ..	13,475,340	757,507	245,035	414,315	744,755	+ 12,752

(ii) *Country Towns.* (a) *Water Supply.* In addition to the City of Brisbane, there were, at 30th June, 1957, 142 cities and towns in Queensland provided with water supply systems controlled by municipal and shire councils.

(b) *Sewerage Systems.* At 30th June, 1957, there were 14 cities and towns outside the metropolitan area—Bundaberg, Charleville, Cunnamulla, Goondiwindi, Hughenden, Ipswich, Mackay, Maryborough, Quilpie, Rockhampton, Toowoomba, Townsville and Warwick—with sewerage systems. Sewerage systems were in course of construction at Barcardine, Bowen, Blackall, Cairns, Longreach, Mt. Isa, Redcliffe, Roma, Surat and Winton.

(c) *Finances.* The receipts (other than loan) of water undertakings controlled by the cities and towns referred to above amounted to £1,584,454 in 1956-57. Expenditure amounted to £1,648,840, including £615,342 for debt charges. In addition, loan expenditure amounted to £1,697,301.

Finances of sewerage undertakings are incorporated in council general funds and are not available separately.

4. South Australia.—(i) *General.* The water supply and sewerage systems in this State were constructed and are maintained by the Engineering and Water Supply Department under the control of the Minister of Works. The works controlled comprise the Adelaide, Barossa, Baroota Creek, Beetaloo, Bundaleer, Tod River, Warren and other country water districts systems, the Morgan-Whyalla water supply system, the Adelaide metropolitan sewerage system, the Murray River Weirs water conservation, and the Metropolitan Flood Waters Scheme. In 1955-56, construction commenced on the Salisbury-Elizabeth Sewerage Scheme.

(ii) *South Australian Waterworks.* (a) *Services.* The table hereunder shows particulars of the area, capacity, etc. of combined metropolitan and country waterworks for the years 1938-39 and 1953-54 to 1957-58 :—

WATERWORKS, SOUTH AUSTRALIA : SERVICES.

Year.	Assessments.(a)		Area of Districts Supplied. (a)	Capacity of Reservoirs, Tanks, etc.	Length of Mains.	Number of Meters.
	Number.	Annual Value.				
		£	Acres.	Mill. gals.	Miles.	
1938-39.. ..	185,625	6,302,445	11,857,968	23,814	6,384	97,074
1953-54.. ..	237,742	14,319,989	11,985,353	24,013	7,555	125,144
1954-55.. ..	239,389	15,307,092	12,100,784	24,014	7,700	134,058
1955-56.. ..	243,809	20,827,954	12,106,795	24,014	7,777	150,317
1956-57.. ..	250,306	22,687,480	12,860,508	24,015	7,916	166,350
1957-58.. ..	272,894	26,810,750	12,983,539	33,949	8,260	180,815

(a) Excludes Morgan-Whyalla Water Supply—water sold by measure.

(b) *Finances.* Figures for 1938-39 and 1953-54 to 1957-58 are shown in the following table.

WATERWORKS, SOUTH AUSTRALIA : FINANCES.

(£.)

Year.	Invested Capital to 30th June.	Revenue.	Expenditure.			Deficit.
			Working Expenses.	Interest and Debt Redemption.	Total.	
1938-39.. ..	14,649,052	653,842	241,684	651,970	893,654	239,812
1953-54.. ..	32,156,877	1,505,690	1,424,169	883,876	2,308,045	802,355
1954-55.. ..	37,353,231	1,725,017	1,855,026	1,095,914	2,950,940	1,225,923
1955-56.. ..	41,501,133	2,082,694	1,920,666	1,328,068	3,248,734	1,166,040
1956-57.. ..	45,239,197	2,318,072	2,295,444	1,485,486	3,780,930	1,462,858
1957-58.. ..	49,161,026	3,028,193	2,944,648	1,740,157	4,684,805	1,656,612

(iii) *Adelaide Waterworks.* At 30th June, 1958, the Adelaide waterworks supplied a district of 146,284 acres. The capacity of its five reservoirs and storage tanks was 14,469 million gallons and there were 2,037 miles of mains.

The Mannum-Adelaide pipeline conveys water from the River Murray to Angas Creek and supplements the Metropolitan and Warren systems, serving country areas en route. Another major project, the construction of a large reservoir on the South Para River, is now completed. This reservoir provides additional storage to serve the lower northern areas of the State and makes some additional provision for the metropolitan area. The capacity of the new reservoir is about 10,000 million gallons.

Particulars of finances for the years 1938-39 and 1953-54 to 1957-58 are shown below :—

**ADELAIDE WATERWORKS : FINANCES.**

(£.)

Year.	Invested Capital to 30th June.	Revenue.	Expenditure.			Surplus (+) or Deficit (-).
			Working Expenses. (a)	Interest.	Total.	
1938-39 .. ..	4,676,110	446,273	111,161	202,279	313,440	+ 132,833
1953-54 .. ..	14,438,595	968,575	614,308	377,909	992,217	- 23,642
1954-55 .. ..	17,922,472	1,062,519	923,222	511,127	1,434,349	- 371,830
1955-56 .. ..	20,434,323	1,358,896	930,138	646,720	1,576,858	- 217,962
1956-57 .. ..	23,115,689	1,492,610	1,218,285	759,012	1,977,297	- 484,687
1957-58 .. ..	25,900,153	2,045,625	1,621,017	906,988	2,528,005	- 482,380

(a) Includes debt redemption.

(iv) *Adelaide Metropolitan Sewerage.* The Adelaide metropolitan sewerage system, comprising the Adelaide, Glenelg and Port Adelaide areas, with drainage areas of 109 square miles in all, includes a sewage farm, and treatment works at Glenelg and Port Adelaide. The total quantity of sewage pumped by the various stations was 6,760 million gallons during 1957-58. Other particulars for 1938-39 and 1953-54 to 1957-58 are shown hereunder :—

**ADELAIDE METROPOLITAN SEWERAGE : SUMMARY.**

Year.	Length of Sewers.	Number of Connexions.	Invested Capital to 30th June.	Revenue.	Expenditure.			Surplus (+) or Deficit (-)
					Working Expenses. (a)	Interest.	Total.	
	Miles.		£	£	£	£	£	£
1938-39 .. ..	923	80,745	3,361,034	268,880	77,023	150,273	227,296	+ 41,584
1953-54 .. ..	1,244	126,375	6,325,084	601,253	440,028	179,435	619,463	- 18,210
1954-55 .. ..	1,292	131,932	6,974,042	641,194	468,969	205,594	674,563	- 33,369
1955-56 .. ..	1,335	137,995	7,602,416	866,754	577,872	238,748	816,620	+ 50,134
1956-57 .. ..	1,370	143,743	8,273,936	1,167,508	648,999	263,270	912,269	+ 255,239
1957-58 .. ..	1,411	149,104	9,213,112	1,393,260	653,810	309,145	962,955	+ 430,305

(a) Includes debt redemption.

(v) *Country Sewerage Schemes.* In 1957-58, the total length of the Salisbury sewerage scheme was 53 miles and the number of its connexions 4,233. The Port Lincoln scheme, which is one mile in length, had 37 connexions in 1957-58.

(vi) *Country Water Supply.* Water district systems outside Adelaide at 30th June, 1958, comprised an area of 12,837,255 acres, and the capacity of the reservoirs was 19,480 million gallons. These figures exclude the Morgan-Whyalla supply system, which obtains its water from the River Murray. The storage tanks of this system had a capacity of 44 million gallons.

The Uley-Wanilla sub-artesian basin has been utilized to augment the Tod River District supplies. Pumping began in 1947. In 1957-58, nine bores were in operation and 458 million gallons were pumped from the basin to meet the needs of Port Lincoln. At 30th June, 1958, £5,185,843 had been invested in the Tod River District.

Construction work is proceeding on the scheme to reticulate water to Yorke Peninsula. The trunk main from Bundaleer Reservoir has been extended to South of Minlaton and country lands are fully reticulated to about the latitude of Maitland.

The following table gives financial information on country waterworks for 1938-39 and 1953-54 to 1957-58 :-

COUNTRY WATERWORKS, SOUTH AUSTRALIA : FINANCES.

(£.)

Year.	Invested Capital to 30th June.	Revenue.	Expenditure.			Deficit.
			Working Expenses. (a)	Interest.	Total.	
1938-39.. ..	10,015,613	207,569	130,523	449,691	580,214	372,645
1953-54.. ..	17,718,282	537,115	809,861	505,967	1,315,828	778,713
1954-55.. ..	19,430,759	662,498	931,804	584,787	1,516,591	854,093
1955-56.. ..	21,066,810	723,798	990,528	681,348	1,671,876	948,078
1956-57.. ..	22,123,508	825,462	1,077,159	726,474	1,803,633	978,171
1957-58.. ..	23,260,873	982,568	1,323,631	833,169	2,156,800	1,174,232

(a) Includes debt redemption.

(vii) *Morgan-Whyalla Water Supply Scheme.* This scheme, which involved the laying of 223 miles of main, was officially opened on 31st March, 1944, the capital invested to 30th June, 1958, being £2,572,445. Particulars of this scheme, where applicable, are included in the tables of the combined waterworks in (ii) above. During 1957-58, the water used from the system between Hanson and Whyalla amounted to 2,807 million gallons. Revenue for the year 1957-58 was £324,065, working expenses, etc., £286,299, interest charges, £183,902, and deficit, £46,136. Corresponding figures for 1956-57 were respectively £195,876, £175,519, £83,983 and £63,626.

5. *Western Australia.*—(i) *General.* The water supply, sewerage and drainage systems of Western Australia are principally under the management of two State Government Departments namely, the Metropolitan Water Supply, Sewerage and Drainage Department, having as its territory the metropolitan area centred on Perth and extending to Kwinana and Serpentine in the South, Marmion in the north and to Greenmount on the east, and the Public Works and Country Water Supply Department, which controls the Comprehensive Water Supply Scheme (covering the Goldfields and Agricultural Areas Water Supply and the Great Southern Towns Water Supply) as well as supplies, from local sources, to fifty country towns not included in the scheme. Both Departments are administered under the portfolio of Minister for Works and Water Supplies.

(ii) *Metropolitan Water Supply, Sewerage and Drainage.* (a) *General.* The sources of the metropolitan water supply are the Canning Dam, the Churchman Brook Reservoir, the Victoria Reservoir, the Wungong Brook Diversion Weir and, since November, 1957, a pipehead dam (capacity 850 million gallons) on the Serpentine River. The supply from these sources is supplemented as necessary from a number of artesian bores and from a pipeline link with Mundaring Weir. The largest reservoir, the Canning Dam, has a capacity of 20,550 million gallons. Since the opening of the Serpentine pipehead dam, work has proceeded on the main Serpentine Reservoir designed to have an ultimate capacity of 39,000 million gallons, the estimated cost of the whole project being £9 million.

The sewage treatment works of Perth and suburbs consist of primary sedimentation with separate sludge digestion and discharge of all effluent direct to the ocean. Fremantle treatment works consists of septic tanks with ocean outfall for effluent. There are three treatment works, situated at West Subiaco, Swanbourne and Fremantle.

(b) *Water Supply.* The following table shows particulars of water supply services for 1938-39 and 1953-54 to 1957-58.

## METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA : SERVICES.

Year.	Number of Services.	Estimated Population Supplied.	Average Daily Consumption.	Total Consumption for Year.	Average Daily Consumption.		Length of Mains.	Number of Meters.
					Per Service.	Per Head of Estimated Population.		
1938-39 ..	61,467	248,248	Mill. gals. 14.1	Mill. gals. 5,147	Gallons. 229	Gallons. 56.8	Miles. 953	40,014
1953-54 ..	102,093	323,131	34.9	12,743	342	108.0	1,500	73,780
1954-55 ..	108,755	367,429	38.2	13,948	351	104.0	1,597	78,194
1955-56 ..	113,437	380,294	39.5	14,408	348	103.5	1,709	82,636
1956-57 ..	118,230	393,596	41.0	14,982	355	106.2	1,792	83,151
19 .. -58 ..	122,159	407,376	47.5	17,337	394	118.4	1,891	85,896

Water rating for 1957-58 was 1s. 6d. in the £1 on annual valuation.

(c) *Sewerage and Drainage.* Some particulars of the metropolitan sewerage and drainage services for 1938-39 and 1953-54 to 1957-58 are shown below :—

## METROPOLITAN SEWERAGE AND DRAINAGE, WESTERN AUSTRALIA : SERVICES.

Year.	Houses Connected.	Estimated Population Served.	Length of Sewers.	Length of Stormwater Drains.
1938-39 ..	36,652	162,457	Miles. 444	Miles. 31
1953-54 ..	56,526	238,400	654	34
1954-55 ..	58,543	232,000	675	34
1955-56 ..	60,702	240,860	692	34
1956-57 ..	62,282	246,900	709	37
1957-58 ..	63,969	253,800	713	66

Sewerage rating for 1957-58 was 1s. 9d. in the £1 on annual valuation, while metropolitan main drainage rating was 4d.

(d) *Finances.* The following table shows particulars of the finances of the Western Australian Metropolitan Water Supply, Sewerage and Drainage Department for the years 1938-39 and 1953-54 to 1957-58 :—

## METROPOLITAN WATER SUPPLY AND SEWERAGE AND DRAINAGE, WESTERN AUSTRALIA : FINANCES.

(£.)

Service and Year.	Capital Cost to 30th June.	Revenue.	Expenditure.			Surplus(+) or Deficit(-).
			Working Expenses.	Interest and Debt Redemption.	Total.	
<b>Water Supply—</b>						
1938-39 ..	4,898,167	285,313	50,975	228,527	279,502	+ 5,811
1953-54 ..	9,874,822	811,500	408,714	380,729	789,443	+ 22,057
1954-55 ..	11,255,210	946,922	498,254	428,169	926,423	+ 20,499
1955-56 ..	12,267,020	1,080,601	560,776	484,164	1,044,940	+ 35,661
1956-57 ..	13,672,321	1,153,737	548,832	598,102	1,146,934	+ 6,803
1957-58 ..	15,283,093	1,260,873	617,755	658,876	1,276,631	- 15,758
<b>Sewerage and Drainage—</b>						
1938-39 ..	3,497,938	174,950	30,630	149,714	180,344	- 5,394
1953-54 ..	5,749,506	542,476	235,826	263,713	499,539	+ 42,937
1954-55 ..	6,170,669	601,802	254,062	281,590	535,652	+ 66,150
1955-56 ..	6,421,032	675,419	313,514	296,904	610,418	+ 65,001
1956-57 ..	6,843,818	713,823	336,284	339,664	675,948	+ 37,875
1957-58 ..	7,212,701	779,165	362,363	356,023	718,386	+ 60,779

(iii) *Country Water Supplies Controlled by Public Works Department.* (a) *Comprehensive Water Supply Scheme.* The Comprehensive Water Supply Scheme is under construction as the result of an agreement by which the cost of new works now estimated to be about £10 million, is shared by the Commonwealth and State Governments. The project consists of two main parts, a northern section, being an expansion of the Goldfields and Agricultural Areas Water Supply, to serve, when completed, over 4,000,000 acres of agricultural land and to augment supplies to the Eastern Goldfields, and a southern section, the Great Southern Towns Water Supply, designed to serve principally towns between Brookton and Katanning. Expenditure on the Scheme to 30th June, 1958, amounted to £6,618,037. The Goldfields and Agricultural Areas Supply, formerly known as the Goldfields Water Supply, is drawn from Mundaring Weir (capacity 15,154 million gallons), situated 26 miles from Perth and has a main conduit, with eight pumping stations, running eastwards some 350 miles to Kalgoorlie. Extensions link up with local catchment and conservation schemes, thereby increasing and guaranteeing the supply to the agricultural lands and the towns which they serve. Supplies for the Great Southern Towns are piped from Wellington Dam, on the Collie River, which is being enlarged ultimately to provide storage for 40,800 million gallons.

(b) *Other Schemes Supplying Country Towns.* Fifty country towns are supplied by local schemes variously from stream flow, natural and artificial catchments, bores and wells. Forty-nine of these schemes, as well as the Goldfields and Agricultural Areas Water Supply and the Great Southern Towns Water Supply are administered under the provisions of the Country Areas Water Supply Act 1947-57. The Minister exercises under the Act powers of a Water Board in one additional town.

(iv) *Other Water Supplies.* (a) *Commonwealth and State Government Railways.* Railways of the Commonwealth and State Governments make independent provision for supplies of water for their own purposes, although considerable additional quantities are consumed by the Railways from other sources e.g. Public Works and Metropolitan Water Supply Departments.

(b) *Local Water Boards.* There are ten local Water Boards operating under the Water Boards Act, 1904-53.

6. *Tasmania.*—(i) *Waterworks.* At the end of 1957-58, there were 74 municipally operated waterworks in Tasmania. The capacity of the reservoirs was 1,750 million gallons, the estimated population served was 247,000 and the number of tenements served was 62,000. In addition, two regional schemes operated by the State Government were serving an estimated population of 30,000 in 7,500 tenements.

(ii) *Sewerage.* At the end of 1957-58, there were 11 municipal sewerage schemes in operation in Tasmania. They served an estimated population of 160,000 and the number of tenements served was 41,000.

## § 6. Harbour Boards and Trusts.

NOTE.—The number and net tonnage of all vessels which entered the major ports in each State during the years 1956-57 and 1957-58 are shown in Chapter XIV.—Transport and Communication, Part I, Division A. §5. Shipping at Principal Ports. Particulars of oversea and interstate cargo discharged and shipped during 1957-58 are shown in Part I, Division A. §6 of the same chapter.

1. *New South Wales.*—(i) *Maritime Services Board of New South Wales.* (a) *General.* The Maritime Services Board of New South Wales is a corporate body of five Commissioners comprising three full-time members and two part-time members representing shipping and other interests. The Board was constituted on 1st February, 1936, under the Maritime Services Act 1935, to co-ordinate the port and navigation services of the State, which had previously been administered by the Sydney Harbour Trust and by the State Department of Navigation.

The Board exercises general control over intra-state shipping, including the survey and certification of vessels, the licensing of harbour craft, and the examination and issue of certificates to officers. It is responsible for the provision of pilotage services, lights, beacons, buoys and other port facilities, imposes and collects rates and charges on goods and vessels, and is vested with the general control and management of the navigable waters and ports within the State.

At the Port of Sydney, the Board is also responsible for the provision of adequate wharfage and channels, and carries out all construction, maintenance and dredging work. At other ports of New South Wales, such work is undertaken by the Department of Public Works.

(b) *Port of Sydney.* The entrance to Sydney Harbour, the principal port of New South Wales, is nearly a mile wide, and the depth of its navigable channel is not less than 80 feet. Between the entrance, known as "The Heads", and the Harbour proper, a distance of 4 miles, there are two separate channels, each 700 feet wide, the Western Channel not less than 42 feet deep (low water ordinary spring tide) and the Eastern Channel 41 feet deep. The foreshores, which have been reduced by reclamations, are 152 miles in length and the total area of the port is 13,600 acres, or 21 square miles, of which about one-half has a depth of 30 feet or more at low water ordinary spring tide. The mean range of tides is 3 feet 6 inches.

The wharves are situated in close proximity to the business centre of the city, about four or five miles from the Heads. At present, there are 6 dolphin berths each 550 feet long, and 105 effective commercial cargo berths with a total length of 48,838 feet controlled by the Board. Accommodation for harbour craft amounts to 4,640 feet while the length of other berths including oil and private wharves totals 32,620 feet. Depth of water at wharves is up to 40 feet. Special facilities for the storage and handling of staple products such as wheat, wool, etc., are provided and modern plant has been installed for replenishing ships' bunkers with oil or coal.

Docking facilities are available for the largest vessel afloat. The Captain Cook Graving Dock, opened in March, 1945, ranks amongst the largest graving docks in the world being 1,133 feet by 147 feet 7½ inches with a depth of 45 feet 2 inches over the sill at high water. There are also several smaller dry docks and floating docks in the port.

The following table shows particulars of the finances of the Board in respect of the Port of Sydney for 1938-39 and 1952-53 to 1956-57 :—

**MARITIME SERVICES BOARD : FINANCES OF THE PORT OF SYDNEY.**

(£.)

Year.	Total Capital Debt at 30th June.	Revenue.			Expenditure.			Surplus (+) or Deficit (-).
		Wharfage and Trampship Rates.	Tonnage Rates and Berthing Charges.	Total.	Adminis-tration and Maintenance.	Interest, Debt Redemption, Exchange, etc.	Total. (a)	
1938-39	11,276,399	773,501	38,180	1,155,627	380,120	536,781	916,901	+ 238,726
1952-53	12,562,700	971,553	254,637	2,021,121	1,529,050	546,590	2,075,640	- 54,519
1953-54	12,799,104	1,482,492	333,320	2,471,540	1,517,811	550,654	2,318,465	+ 153,075
1954-55	13,408,326	1,814,226	515,480	3,093,315	1,735,504	393,478	2,978,982	+ 114,333
1955-56	13,775,278	1,688,743	459,783	3,042,924	1,740,698	644,783	2,910,481	+ 132,443
1956-57	14,041,252	1,725,590	385,006	2,887,506	1,857,539	722,373	2,869,912	+ 17,594

(a) Excludes capital expenditure but includes transfers to the Renewals Fund Reserve Account 1953-54, £250,000; 1954-55, £650,000; 1955-56, £525,000; and 1956-57, £299,000.

Capital expenditure for each of the years 1938-39 and 1952-53 to 1956-57 was £496,489, £468,026, £473,516, £599,752, £553,329 and £716,597 respectively. Expenditure on renewals and replacements from the Renewals Fund Reserve Account was: 1952-53, £299,286; 1953-54, £317,493; 1954-55, £306,542; 1955-56, £630,537 and 1956-57, £684,210

(c) *Port of Newcastle.* The Maritime Services Board of New South Wales is the port authority but other government bodies are responsible for certain functions and activities of a maritime character at Newcastle. These include—

- (i) The Department of Public Works, which is the constructing, dredging and maintenance authority at Newcastle as well as at other New South Wales ports except Sydney;
- (ii) The Department of Railways, which is responsible for the control of wharfage and shipping arrangements in connexion with the coal industry and the provision and maintenance of appliances necessary for the transport and shipment of coal.

An Advisory Committee consisting of eight members, appointed by the Governor, assists the Board in matters associated with the operation of the port. It is primarily a coal-loading port, and the proximity to the coal fields has led to the establishment of important industries, including iron and steel works, in the district. Facilities are available for the shipment of wool, wheat and frozen meat, and a wharf is available for timber.

The area used by shipping is about 570 acres, excluding the entrance to the harbour and the inner basin, which together cover an area of 162 acres. The width of the harbour at the entrance is 1,200 feet, and the navigable channel, with a depth of 25 feet 6 inches at low water, is 350 feet wide. Wharfage accommodation amounts to 16,840 feet, the Maritime Services Board controlling 7,230 feet and the Railways Department 5,810 feet while 3,800 feet is privately owned. There are also several dolphin berths available for tie-up purposes. A floating dock of 15,000 tons capacity is available at the port.

(d) *Port Kembla.* As from 3rd May, 1948, the Maritime Services Board assumed the administration and navigational control of Port Kembla, which had previously been administered by the New South Wales Department of Public Works. The Department, however, continues to be the constructing authority in respect of works, dredging and maintenance. An Advisory Committee consisting of seven members appointed by the Governor has been formed to assist the Board in the operation of the Port. It has an area of approximately 330 acres, with depths ranging from 20 to 50 feet (low water ordinary spring tide), and wharfage accommodation totalling 4,800 feet has been provided for large ocean-going vessels. No cargo sheds are available as the nature of trade at the port does not call for the provision of sheltered storage accommodation at the berths. It is the port of the southern coalfields and for the expanding industrial area in and about Wollongong. The developmental programme for Port Kembla includes the construction of an inner harbour to provide wharfage for the steelworks in addition to general cargo berths.

(e) *Botany Bay.* The Maritime Services Board of New South Wales is the administrative and controlling authority. The port is primarily a discharging centre for the oil refinery at Kurnell and two berths are available as well as tanker mooring buoys. The entrance to the Bay is approximately  $1\frac{1}{4}$  miles wide, with a minimum depth of about 36 feet.

(f) *Other Ports.* In addition to the ports of Sydney, Newcastle, Port Kembla and Botany Bay, the Board controls 28 outports along the coastline of 609 miles. The shipping trade of these outports is relatively small.

(ii) *Port Charges.* The port charges payable in respect of shipping and ships' cargoes in New South Wales are imposed by the Commonwealth Government in terms of the Light-houses Act and the Navigation Act, and by the State authorities under the Navigation Act of New South Wales, the Harbour and Tonnage Rates Act, and the Sydney Harbour Trust Act. Since 1st February, 1936, the State enactments have been administered by the Maritime Services Board. The gross collections by the State authorities amounted to £5,096,853 in 1956-57. These figures include the Port of Sydney revenue (*see* table on p. 722) and State navigation service collections (£2,209,347 in 1956-57). Commonwealth Government revenue from light dues and navigation receipts, for the whole of Australia, amounted to £451,493 in 1956-57.

2. *Victoria.*—(i) *Melbourne Harbor Trust.* (a) *General.* Information regarding the origin and constitution of this Trust, which controls the Port of Melbourne, appears in Official Year Book No. 12, page 970 *et seq.* The membership of the Board of the Melbourne Harbor Trust Commissioners was increased to five during 1954 by the appointment of a further part-time Commissioner to represent waterside workers' interests. At 31st December, 1957, the sheds available for wharfage accommodation had a length of 21,579 feet, covering an area of 1,561,162 square feet. The area of water in Port Philip Bay and the River Yarra under the control of the Trust is approximately 5,327 acres and the total length of wharves, piers and jetties in the port is 66,083 feet, giving an area of over 63 acres of wharfage, and 58,170 feet of effective berthing space. During 1957, work was continued on the new berths at Appleton Dock (ultimately to have eighteen berths), Victoria Docks, South Wharf and Williamstown. The depth of water (low water ordinary spring tide) from the main channels to the principal wharves is about 31 to 34 feet, the maximum being about 40 feet.

(b) *Finances.* The following table shows particulars of the financial operations of the Trust during the years 1939 and 1953 to 1957.

## MELBOURNE HARBOR TRUST : FINANCES.

(£.)

Year.	Gross Loan Indebtedness at 31st December.	Revenue.		Expenditure.				Surplus (+) or Deficit (-).
		Wharfage and Tonnage Rates.	Total.	Administration and Maintenance.	Interest, Debt Redemption, Exchange, etc.	Depreciation, Renewals and Insurance Account.	Total, (a)	
1939 ..	4,018,527	689,100	843,899	282,533	270,650	129,160	837,577	+ 6,322
1953 ..	9,581,933	1,423,345	2,052,272	1,230,195	381,914	98,182	2,013,554	+ 38,718
1954 ..	9,641,361	1,800,811	2,593,347	1,232,574	418,818	479,393	2,509,947	+ 83,400
1955 ..	9,978,842	2,120,780	3,019,048	1,475,467	446,348	532,372	2,906,406	+ 112,642
1956 ..	11,296,811	1,841,176	2,676,698	1,649,047	483,905	145,825	2,662,047	+ 14,651
1957 ..	12,175,428	1,882,501	2,746,513	1,557,933	520,223	250,938	2,718,159	+ 28,354

(a) Includes statutory payments to Consolidated Revenue and Geelong Harbor Trust :—1939 £155,234; 1953. £303,263; 1954. £379,162; 1955. £452,219; 1956. £383,270, 1957. £389,065; Excludes capital expenditure:—1939. £128,567; 1953. £1,255,613; 1954. £1,255,625; 1955. £1,509,665; 1956. £1,609,928; 1957. £1,054,236.

(ii) *Geelong Harbor Trust.* The Geelong Harbor Trust, which was constituted in 1905, was reconstituted in 1934 under the provisions of the Melbourne and Geelong Harbor Trusts Act 1934. The Trust is under the control of three Commissioners appointed by the Governor-in-Council. At 31st December, 1956, the minimum depth of all berths (except Yarra Pier 29 feet) was 32 feet low water. Further dredging, to a minimum depth of 36 feet low water at Refinery Pier, is due for completion in 1958.

Revenue for the year 1957 was £905,111, and revenue expenditure was £530,939. The value of the Trust's fixed assets less depreciation was £5,431,089 and £6,824,364 at 31st December, 1956 and 1957, respectively. Loans outstanding at the end of 1957 amounted to £2,889,365.

(iii) *Other Ports.* Apart from Melbourne and Geelong, Portland is the only Victorian port of other than minor importance.

3. *Queensland.*—(i) *General.* The ports of Queensland, except Brisbane and certain minor ports, are administered by Harbour Boards with members representing the towns and districts served by the ports. Brisbane and the minor ports are controlled by the State Treasury through the Department of Harbours and Marine, which supervises the engineering activities of the other ports.

(ii) *Brisbane.* Brisbane accommodates comfortably, in its dredged and improved river, the largest vessels in the Australian trade. The main centres for shipping, although further downstream than formerly, because of the increasing size of vessels, are still within easy access of the city. Adequate dry-docking facilities are available. The finances of Brisbane Harbour for the years 1938–39 and 1952–53 to 1956–57 are shown below:—

## BRISBANE HARBOUR : FINANCES.

(£'000.)

Year.	Loan Indebtedness at 30th June.	Receipts.		Payments.	
		Harbour Dues.	Total.	Working Expenses.(a)	Total
1938–39 .. ..	1,179	165	173	36	112
1952–53 .. ..	2,168	318	393	426	558
1953–54 .. ..	2,528	603	753	460	611
1954–55 .. ..	2,633	688	853	522	693
1955–56 .. ..	2,899	701	817	582	772
1956–57 .. ..	3,011	671	918	843	1,048

(a) Excludes Interest and Redemption.

In addition to Brisbane Harbour, the Department of Harbours and Marine also controls the Brisbane Dry Dock, the Cairncross Dock, the Brisbane River, and ten smaller harbours not administered by harbour boards.

(iii) *Harbour Boards.* Harbour boards control the ports of Bowen, Bundaberg, Cairns, Gladstone, Mackay, Rockhampton and Townsville. From 1st January, 1953, the harbour boards adopted the financial year ended 30th June for accounting purposes instead of the calendar year as previously. Finances for each port for the year ended 30th June, 1957, are shown below, together with a summary for the years 1939 and 1952, for the period of eighteen months ended 30th June, 1954 and for the years ended 30th June, 1955 and 1956.

**HARBOUR BOARDS, QUEENSLAND : FINANCES.**  
(£.)

Harbour Board.	Loan Indebted- ness at 30th June. (a)	Revenue.		Expenditure (excluding Loan).		Surplus (+) or Deficit (-).
		Wharf- age and Harbour Dues.	Total.	Working Expenses.	Total (including Interest and Redem- ption). (b)	
Bowen	387,873	47,271	62,059	27,491	57,663	+ 4,396
Bundaberg	340,403	3,042	23,766	17,213	21,223	+ 2,543
Cairns	250,660	169,558	220,040	192,211	226,674	- 6,634
Gladstone	519,123	32,997	83,608	65,750	99,594	- 15,986
Mackay	1,061,832	191,445	227,798	61,970	434,819	- 207,021
Rockhampton	530,250	62,339	74,362	45,257	80,217	- 5,855
Townsville	477,194	251,126	314,353	168,367	250,338	+ 64,015
<b>Total, 1956-57</b>	<b>3,567,335</b>	<b>757,778</b>	<b>1,005,986</b>	<b>578,259</b>	<b>1,170,528</b>	<b>- 164,542</b>
„ 1955-56	2,885,528	720,642	955,846	512,776	1,361,568	- 405,722
„ 1954-55	2,807,527	766,504	1,108,613	530,541	996,604	+ 112,009
„ 1954(c)	2,713,679	955,464	1,413,894	789,346	1,167,936	+ 245,958
„ 1952	2,059,080	455,677	713,312	440,784	696,843	+ 16,469
„ 1939	1,548,144	249,510	401,439	139,752	343,083	+ 58,356

(a) Years 1939 and 1952, 31st December. (b) Includes expenditure on capital works from accumulated revenue. (c) Eighteen months ended 30th June, 1954.

4. *South Australia.—The South Australian Harbors Board.* All South Australian harbours are controlled by the The South Australian Harbors Board, which consists of three Commissioners appointed by the Governor for a period of five years and eligible for re-appointment. The Board is responsible to the Minister of Marine for the discharge of its duties and functions. The most important ports are the five deep sea ports of Port Adelaide, Port Pirie, Wallaroo, Port Lincoln and Thevenard. At a few ports, the wharves or jetties are privately controlled, the principal of these being Whyalla (controlled by the Broken Hill Pty. Co. Ltd. under a Private Act of Parliament), Ardrossan where the Broken Hill Pty. Co. Ltd. has installed a bulk loading plant for handling dolomite, grain and salt, and Rapid Bay which is also controlled by the Broken Hill Pty. Co. Ltd. Port Augusta is controlled by the Commonwealth Railways on behalf of the Commonwealth Government. Maximum depths of water (low water ordinary spring tide) at the wharves of the main ports range from 20 to 24 feet at Port Pirie to 35 feet at Port Adelaide (Outer Harbour). The following table shows the finances of the Board for 1938-39 and 1953-54 to 1957-58:—

**THE SOUTH AUSTRALIAN HARBORS BOARD : FINANCES.**  
(£.)

Year.	Capital at 30th June. (a)	Revenue.	Expenditure from Revenue.				Surplus (+) or Deficit (-).
			Working Expenses.	Interest.	Debt Redem- tion.	Total.	
1938-39	8,026,441	664,915	205,848	326,719	50,000	582,567	+ 82,348
1953-54	10,782,702	1,382,276	1,280,709	312,333	..	1,593,042	- 210,766
1954-55	11,604,213	1,842,796	1,315,349	352,005	..	1,667,354	+ 175,442
1955-56	12,366,653	1,920,340	1,451,296	404,188	..	1,855,484	+ 64,856
1956-57	13,232,185	2,112,718	1,427,882	434,042	..	1,861,924	+ 250,794
1957-58	14,189,715	2,119,826	1,487,014	505,322	..	1,992,336	+ 127,490

(a) State Treasurer's Funds and Reserve employed.

5. *Western Australia.*—(i) *Fremantle Harbour Trust.* Fremantle Harbour is controlled by a board of five Commissioners appointed by the Government. The Inner Harbour has a maximum water depth of 36 feet at the entrance and 34 feet at the wharf face. Wharf berth accommodation is 11,148 feet. The Outer Harbour consists of various sections south of the Inner Harbour with jetty facilities including the Kwinana Oil Refinery jetties which are approached through the Success and Parmelia Channels each 500 feet wide and 38 feet deep. The depth of water at the berths is a minimum of 44 feet.

Gross earnings for the years 1956–57 and 1957–58 amounted to £2,515,118 and £2,577,755 respectively, working expenses to £2,031,368 and £2,017,798, interest charges to £209,519 and £216,839, debt redemption to £55,806 and £59,414 and renewals fund to £2,000 each year. Special loan redemptions were £213,432 and £246,002 and net capital totalled £6,411,752 and £6,813,243.

(ii) *Albany Harbour Board.* The Albany Harbour is controlled by a board of five members appointed by the Government. The depth of water in the Harbour is 30 feet but dredging to accomplish a water depth of 34 feet is nearing completion. Wharf accommodation consists of 1,115 feet and in addition the Deepwater Jetty has 2,500 feet of accommodation. Gross earnings for the years 1956–57 and 1957–58 amounted to £92,431 and £103,573 respectively, working expenses £48,487 and £50,196, interest and sinking fund charges, £19,650 and £81,648, and amounts debited to loan capital account, £1,652,461 and £1,687,144. (Prior to 1957–58, interest on loan capital for uncompleted works was charged against the asset values and capitalized. During 1957–58, however, the wharf construction was completed and the total interest was charged against revenue for the first time. This accounts for the large increase between 1956–57 and 1957–58.)

(iii) *Bunbury Harbour Board.* The Bunbury Harbour is controlled by a board of five members appointed by the Government. The depth of water in the Harbour is 30 feet and berthing accommodation is 3,700 feet. Gross earnings for the years 1956–57 and 1957–58 amounted to £47,338 and £73,811 respectively, working expenses £39,197 and £60,239, interest and sinking fund charges £32,719 and £35,440, and amounts debited to loan capital account, £1,521,691 and £1,593,176.

(iv) *Other Ports.* The following ports are controlled by the State Government Harbour and Lights Department:—Geraldton, Yampi, Port Hedland, Carnarvon, Wyndham, Derby, Point Samson, Busselton, Onslow and Broome. The Port of Esperance is under the control of the Railways Commission.

6. *Tasmania.*—There are eight marine boards and two harbour trusts in Tasmania. The marine boards control the ports of Hobart, Launceston, Stanley (Circular Head) Burnie and Wynyard (Table Cape), Devonport, Strahan, Currie (King Island), and White-mark (Flinders Island) and the harbour trusts those of Smithton and Leven. Aggregate receipts of revenue accounts of all these authorities during the year 1956–57 were £1,161,567, and expenditures £1,106,427 including loan charges £220,634. The total receipts of the Hobart Marine Board during 1956–57 were £495,330, loan charges amounted to £65,113 and total expenditure to £547,314. Launceston Marine Board receipts during 1956–57 amounted to £296,388, loan charges to £23,423 and total expenditure to £222,458. Loan indebtedness of all marine boards and trusts at 30th June, 1957, was £2,710,491, of which £874,242 was in respect of Hobart and £313,595 in respect of Launceston.

Hobart, Launceston, Burnie and Devonport are the principal ports of Tasmania. In addition to their interstate and intra-state traffic, there is also considerable overseas shipping. Depths of water at wharves vary, in general between 16 and 34 feet (low water ordinary spring tide), but at Hobart there is a depth of water of from 30 to 52 feet.

## § 7. Fire Brigades.

1. *New South Wales.*—A Board of Fire Commissioners, consisting of five members, one appointed by the State Government, (President), and one each representing insurance companies, local government authorities, volunteer firemen and permanent firemen, operates under the Fire Brigades Act 1909–1958, and 156 fire districts had been constituted at the end of 1957. Up to the end of 1949, the cost of maintenance of fire brigades was borne in proportions of one quarter, one quarter, and one half respectively by the Government, the municipalities, and the insurance companies concerned, and the expenditure was so regulated that the proportion payable by the councils in a fire district should not, except in special circumstances, exceed the amount obtainable from ¼d. in the £1 rate on the unimproved capital value of ratable land in the fire district. In June, 1949, legislation was introduced (i) increasing the

limit of the Board's borrowing power from £250,000 to £500,000, (ii) providing for the varying of the maximum rate that may be levied by councils and (iii) altering the basis of contributions so that from 1st January, 1950, local councils and the Government will each pay one-eighth and the insurance companies three-quarters. Legislation assented to on 31st March, 1958, increased the limit of the Board's borrowing power to £1,000,000, provided for the contributions payable by insurance companies to be assessed on premiums received in the State as a whole, and provided for appeals by insurance companies against assessments in certain cases.

Other legislation, introduced in September, 1949, to improve and modernize the law dealing with the prevention of bush fires and to build up the organization of the bush fire-fighting services, provided for the establishment of Fire Regions and a Bush Fire Fighting Fund to be financed from contributions by the Government, councils and insurance companies in the proportion of one-quarter, one-quarter and one-half, respectively. The contribution of any council shall not exceed one-twentieth of a penny in the £1 on the unimproved capital value of rateable land in the area of the council not being land within a fire district constituted under the Fire Brigades Act 1908-1958. At 30th June, 1958, Volunteer Brigades numbered 2,000 with an active membership in excess of 60,000 persons. Up to 30th June, 1958, expenditure from the Fund for equipment amounted to £934,500.

At 31st December, 1957, the authorized strength of the Fire Brigade throughout the fire districts of New South Wales was 363 officers and 1,046 permanent and 2,572 volunteer firemen. Corresponding figures for the Sydney Fire District were 301, 982 and 355. The revenue for the year 1957 was £2,425,795, made up as follows:—From the Government, £301,130, municipalities and shires, £301,130; fire insurance companies and firms, £1,806,780; and from other sources, £16,755. The disbursements for the year were £2,608,250.

2. *Victoria.*—(i) *General.* The Fire Brigades Act of 1928 provided for a Metropolitan Fire Brigades Board and a Country Fire Brigades Board each consisting of nine members. In December, 1944, the latter Board was superseded by the Country Fire Authority under an Act of that title, and the number of members was increased to ten. In December, 1954, the number of members of the Metropolitan Fire Brigades Board was increased from nine to ten to include an employees' representative.

(ii) *Metropolitan Fire Brigades Board.* Since 1st October, 1952, the Metropolitan Fire Brigades Board has received contributions from the municipalities and the insurance companies in the proportion of one-third and two-thirds respectively. Prior to 1st October, 1952, the Board received contributions in equal proportions from the Treasury, the municipalities and the insurance companies. On 30th June, 1957, the Board had under its control 42 stations, 773 permanent staff, 184 special service and clerical, etc., staff, and 14 part-time firemen. The total receipts for 1956-57 were £1,421,037 comprising contributions, £1,181,358, receipts for services, £121,907 and interest and sundries, £117,772. The expenditure was £1,309,768.

(iii) *Country Fire Authority.* This authority, constituted in 1944, is responsible for the prevention and suppression of fires in the "country area of Victoria", which embraces the whole of the State outside the metropolitan fire district, excluding State forests and certain crown lands. The country area has been divided into 24 fire control regions, three of which (Ballarat, Bendigo and Geelong) are wholly urban and the remainder mixed urban and rural. The Country Fire Authority has received contributions in the proportion of two-thirds from insurance companies and one-third from the Treasury as from 1st January, 1954. Prior to that date the Treasury contributed two-thirds while the insurance companies contributed one-third. At 30th June, 1957, the Act applied to 182 insurance companies, 200 urban and 1,026 rural fire brigades. The effective registered strength of the brigades was 98,402 members.

Income for the year 1956-57 amounted to £454,786. Total expenditure other than loan amounted to £426,717.

3. *Queensland.*—(i) *General.* Fire Districts are constituted under the Acts of 1920-1956. For each district, there must be a Fire Brigades Board consisting of seven members, and the cost of maintenance of each brigade, following the 1956 amendment of the Act which increased the share of the insurance companies, is proportioned as follows:—The Treasury one-seventh, insurance companies five-sevenths, and local authorities one-seventh.

(ii) *Fire Brigade Boards.* At 30th June, 1957, there were 73 Fire Brigade Boards. The total number of stations was 129 and full-time staff numbered 683, including 17 administrative, 144 officers and 522 firemen. Volunteers numbered 393. Part-time staff numbered 621 including 71 administrative, 100 officers and 450 firemen. The total revenue

for the year 1956–57 was £927,494, received mainly from the following sources:—Government £159,230, local authorities £159,577, insurance companies £572,555. Loan receipts (Government and other) were £113,128. The total expenditure for the year was £867,243, the chief items being salaries and wages £648,710 and interest and redemption of loans £45,250.

4. **South Australia.**—The Fire Brigades Act 1936–1944 provides for a board of five members, and the expenses and maintenance of brigades are defrayed in the proportion of two-ninths by the Treasury (subject to certain limits when the contribution exceeds £10,000), five-ninths by insurance companies, and two-ninths by the municipalities concerned. At 30th June, 1958, there were altogether 35 fire brigade stations, of which 12 were metropolitan and 23 country.

The authorized strength of the permanent staff was 385, including 272 officers and men and 87 country auxiliary firemen. The total revenue for the year 1957–58 was £391,607, including contributions of £342,000 made up as follows:—insurance companies £205,950, Treasury £53,670 and municipalities £82,380. The Treasury contribution includes an additional grant of £41,500.

5. **Western Australia.**—In 1942, certain municipal and road board districts were constituted fire districts under the control of the Western Australian Fire Brigades Board. There were 35 fire districts at 30th September, 1957. The contribution to the Board is made in the proportion of two-ninths from the Government, two-ninths from local government authorities, and five-ninths from insurance companies. The number of local government authorities and insurance companies who contributed numbered 57 and 143 respectively. The brigades throughout the State controlled by the Western Australian Fire Brigades Board at 30th September, 1957, numbered 53, with a staff of 1,580 including 255 permanent officers and firemen and 1,292 volunteer brigade officers and firemen. The revenue for the year ended 30th September, 1957, was £384,457 and the expenditure £385,372.

Under the Bush Fires Act, a Bush Fires Board (appointed April 1955 and superseding the Rural Fires Prevention Advisory Committee) consisting of ten members, five of whom are nominated by the Road Board Association, was set up to advise the Minister for Lands on bush fire control. The Act also provides for the registration of bush fire control officers, who numbered 1,157 at 30th June, 1957, and the establishment of bush fire brigades, the number of which was 654 at 30th June, 1957. Many individual brigades are large organizations with numerous self-contained sections.

6. **Tasmania.**—The Fire Brigades Act 1945 provided for the creation of the Fire Brigades Commission of Tasmania to co-ordinate the activities of existing fire brigades boards, while leaving the responsibility for individual control and management with the boards. The Commission consists of five members nominated or elected by the fire brigades boards and one member nominated by the Minister. Contributions towards the cost of operations are on the basis of one-third each from the Treasury, the municipalities, and the insurance companies concerned. The cost for the year 1956–57 amounted to £138,000. There were at 30th June, 1957, 23 brigades controlling 33 stations and their aggregate staffs numbered 509, including 86 permanent officers and 423 part-time firemen, including officers.

## CHAPTER XX.

### PRIVATE FINANCE.

#### A. CURRENCY.

##### § 1. General.

The Australian monetary system is based on the British system, of which the unit is the pound (£) divided into 20 shillings (s.) each of 12 pence (d.). When the Australian currency was introduced in 1909 the Australian pound was specified as equivalent to 123.27447 grains of gold  $12\frac{1}{12}$ ths fine or 113.002 grains of fine gold and, until the depression in 1930, was identical with the pound sterling. There was a gradual depreciation of the Australian pound in terms of sterling from the beginning of 1930 until 3rd December, 1931, when it was stabilized at the rate of £125 Australian = £100 sterling. This relationship has been maintained until the present time. Following the depreciation, no action was taken to define the value of the Australian pound in terms of gold until 5th August, 1947, when the Australian Government advised the International Monetary Fund, in terms of the membership agreement, that the par value of the Australian pound was 2.86507 grammes (44.2148 grains) of fine gold. From 18th September, 1949, this was reduced to 1.99062 grammes (30.720 grains) of fine gold.

When the Commonwealth was established in 1901, the currency in Australia consisted of United Kingdom gold, silver and bronze coins, notes issued by the banks, and Queensland Treasury notes. Queensland Treasury notes were in circulation in Queensland only, having superseded bank notes in that State after the 1893 crisis. Under the Commonwealth Constitution, the control of currency, coinage and legal tender and the issue of paper money was vested in the Commonwealth. The Commonwealth assumed these powers by enacting the Coinage Act 1909 and the Australian Notes Act 1910.

Australian notes are legal tender in Australia for any amount. Australian silver coins are legal tender for any amount not exceeding forty shillings and Australian bronze coins are legal tender for any amount not exceeding one shilling.

##### § 2. Coinage.

**1. Coins in Circulation.**—Brief historical notes relating to the Australian Coinage are given in Official Year Book No. 37, pages 557 and 558. For weight, metal, composition, etc., of Australian coins in circulation *see* Official Year Book No. 39, page 697.

The silver coins issued prior to July, 1947, have a millesimal fineness of 925 (thirty-seven fortieths silver and three fortieths copper) and those issued since 1st July, 1947, (dated 1946 and later) have a millesimal fineness of 500 (one-half silver and one-half other metals).

From 1910 to 1916, Australian coins were minted in England by the Royal Mint, London, and the Mint, Birmingham Ltd., and in 1916 and 1917 by the Indian Mints. The minting of Australian coins was undertaken by the Australian Mints in 1916 and coins have been minted at the Melbourne branch of the Royal Mint from 1916 to the present time, at the Sydney branch from 1919 until that Mint closed in 1926, and at the Perth branch in 1922 and since 1940.

During the 1939–45 War, the two Australian Mints were unable to meet the demand for Australian coins and some coins were minted in the United States of America and India. In 1951–52 and 1952–53, some coins were minted at the Royal Mint, London, to meet the heavy demand for coins. Details of Australian coins obtained from each mint to 30th June, 1958, are as follows:—Melbourne, £43,608,000; Perth, £1,405,000; Sydney, £488,000; United Kingdom Mints, £3,016,000; United States Mints, £6,000,000; Indian Mints, £169,000; Total, £54,687,000.

**2. Issues of Australian Coins.**—The net issues of Australian silver and bronze coin from 1910 to 30th June, 1958, were:—Crown (5s.), £276,000; Florin (2s.), £18,594,000; Shilling (1s.), £7,173,000; Sixpence (6d.), £5,011,000; Threepence (3d.), £5,690,000; Total silver coin, £36,686,000; Penny (1d.), £2,293,000; Half-penny ( $\frac{1}{2}$ d.), £709,000; Total bronze coin, £3,002,000. Except in the total, no allowance has been made for £58,000 worth of damaged silver coin, for which denominations are not available, withdrawn since 1910.

3. Profits on Coinage of Silver and Bronze.—Australian silver and bronze coins are token coins and, as the face value of the coins is greater than the value of the bullion they contain, a profit is made from their issue. This profit forms part of the Commonwealth Consolidated Revenue. In the following table, details are given of the value of coins issued, the cost of bullion, the cost of minting and sundry expenses connected with the issue, and the profits made on the issue of coins during the years 1938–39 and 1953–54 to 1957–58.

AUSTRALIAN SILVER AND BRONZE COINS : PROFITS FROM ISSUE.  
(£.)

Year.	Coin Issued. (a)	Cost of Bullion.	Gross Profit.	Cost of Minting and Sundry Charges.	Net Profit.
SILVER COIN.					
1938–39 .. ..	219,600	81,314	138,286	18,459	119,827
1953–54 .. ..	2,469,536	1,381,163	1,088,373	233,151	855,222
1954–55 .. ..	2,127,800	1,187,041	940,759	172,552	768,207
1955–56 .. ..	915,900	514,848	401,052	95,770	305,282
1956–57 .. ..	1,932,962	1,101,740	831,222	245,241	585,981
1957–58 .. ..	1,509,885	1,032,098	477,787	205,916	271,871
BRONZE COIN.					
1938–39 .. ..	41,800	7,838	33,962	26,025	7,937
1953–54 .. ..	61,368	71,421	— 10,053	94,963	— 105,016
1954–55 .. ..	14,616	12,666	1,950	45,588	— 43,638
1955–56 .. ..	174,889	163,393	11,496	117,347	— 105,851
1956–57 .. ..	51,560	61,957	— 10,397	58,788	— 69,185
1957–58 .. ..	67,785	59,987	7,798	56,985	— 49,187
TOTAL.					
1938–39 .. ..	261,400	89,152	172,248	44,484	127,764
1953–54 .. ..	2,530,904	1,452,584	1,078,320	328,114	750,206
1954–55 .. ..	2,142,416	1,199,707	942,709	218,140	724,569
1955–56 .. ..	1,090,789	678,241	412,548	213,117	199,431
1956–57 .. ..	1,984,522	1,163,697	820,825	304,029	516,796
1957–58 .. ..	1,577,670	1,092,085	485,585	262,901	222,684

(a) Includes selected and proof pieces.

NOTE.—Minus sign (—) denotes a loss.

4. Australian Mints.—(i) *General.* Soon after the discovery of gold in Australia, a branch of the Royal Mint was established in Sydney. The formal opening took place on 14th May, 1855. The Melbourne branch was opened on 12th June, 1872, and the Perth Branch on 20th June, 1899. The States of New South Wales, Victoria and Western Australia provided an annual endowment in return for which the mint receipts were paid to the respective State Treasuries. Owing to losses incurred in its operations, the Sydney branch was closed at the end of 1926.

Since their establishment, the Australian branches of the Royal Mint have been primarily concerned with the refining of gold, minting of Imperial gold coins and the production of bars and ingots of gold bullion for export. The minting of Imperial gold coins was discontinued in September, 1931. In 1916, the Melbourne branch took over the minting of Australian silver and bronze coins from the Royal Mint, London. Australian coins were also minted at the Sydney Mint from 1919 to 1926 and at the Perth Mint in 1922 and from 1940 to the present time. The Melbourne branch has also minted token coins for the Territory of New Guinea and for New Zealand.

(ii) *Gold Receipts and Issues.* (a) *Receipts.* The receipts of gold at Australian mints during 1957 amounted to 1,003,758 fine ounces (Melbourne, 162,465 fine ounces; Perth, 841,293 fine ounces).

(b) *Issues.* The Australian mints issue gold bullion for the use of local manufacturers (jewellers, dentists, etc.) and for export. Since September, 1931, when the United Kingdom departed from the gold standard, the minting and issue of gold coins by Australian mints has ceased. Australian exports of gold are mainly in the form of 400-oz. ingots, but in earlier years a considerable amount of gold was shipped to India in 10-oz. bars. Since early in the 1939-45 War, all gold has been acquired by the Commonwealth Bank and the export and use of gold has been subject to regulation by the Commonwealth Government. From December, 1951, export of a proportion of newly-mined gold for sale on premium markets overseas was permitted. The issues from Australian mints during 1957 amounted to 1,004,519 fine ounces (Melbourne, 162,515 fine ounces; Perth, 842,004 fine ounces).

5. *Price of Gold.*—The following table shows the average prices of gold and the average value of the sovereign in London and Australia for the years 1938-39 and 1953-54 to 1957-58. The average price of gold in Australia is based on the Commonwealth Bank's buying price for gold lodged with the mints.

PRICE OF GOLD : LONDON AND AUSTRALIA.

Period.	London.				Australia.				
	Average price per fine oz.		Average value of Sovereign.		Average price per fine oz.		Sovereign.		
							Average value.	Equivalent to a premium of—	
	£stg.	s. d.	£stg.	s. d.	£A.	s. d.	£A.	s. d.	%
1938-39.. ..	7	6 9	1	14 7	9	2 9	2	3 0	115.0
1953-54.. ..	12	8 3	2	18 5	15	10 4	3	12 1	260.4
1954-55.. ..	12	10 9	2	18 10	15	12 6	3	12 6	267.8
1955-56.. ..	12	9 11	2	18 10	15	12 6	3	12 6	267.8
1956-57.. ..	12	10 9	2	18 10	15	12 6	3	12 6	267.8
1957-58.. ..	12	9 10	2	18 10	15	12 6	3	12 6	267.8

In December, 1951, arrangements were made whereby producers could sell a proportion of newly-mined gold for industrial purposes on oversea premium markets. Under these arrangements, gold is acquired by the Commonwealth Bank in the usual manner and sold, at the Bank's buying price, to an association representing gold producers participating in the scheme. The association pays the Bank's handling charges and the costs of preparation of the gold and makes arrangements for export and sale. The gold can be sold only against payment in United States dollars. Profits earned by the association after meeting administrative expenses are distributed to members in proportion to the quantity of gold delivered to the Commonwealth Bank. Until August, 1952, when permission was given for the export of fine gold, gold exported under this arrangement was not to exceed a fineness of 22 carats ( $^{11}/_{12}$ ths.).

The average prices per fine ounce in Australian currency (f.o.b.) obtained for gold exported under this scheme for each of the months during 1957-58 for which there were sales, were:—July, £15 13s. 10d.; August, £15 13s. 8d.; September, £15 13s. 9d.

### § 3. Notes.

1. *General.*—Brief historical notes relating to the circulation and issue of notes in Australia are given in Official Year Book No. 37, pages 561 and 562. The issue of notes intended for circulation as money other than by the Commonwealth Bank is prohibited.

2. *The Australian Note Issue.*—(i) *General.* Notes in circulation in Australia are issued by the Commonwealth Bank through the Note Issue Department. The Bank is authorized to issue Australian notes in denominations of 5s., 10s., £1, £5, £10 and any multiple of £10. The Commonwealth Bank is not required to hold a specific reserve in gold against the note issue, but the assets of the Note Issue Department must be held or invested in gold, on deposit with any bank, or in securities of the Government of the United Kingdom, the Commonwealth or a State. In 1958, all the profits of the Note Issue Department were paid to the Commonwealth Consolidated Revenue Fund. A distribution of the profits prior to 1958 may be found in the section dealing with the Commonwealth Bank (*see* para. 5 (iv) page 736).

Australian notes are legal tender to any amount within Australia and have been issued in denominations of 10s., £1, £5, £10, £20, £50, £100 and £1,000. Notes of denominations higher than £10, however, have not been issued to the public since 1945.

(ii) *Australian Notes in Circulation.* Particulars of the average values of notes in circulation for the years 1938–39 and 1953–54 to 1957–58 are given in the following table—

**AUSTRALIAN NOTE ISSUE.**

(£'000.)

Denomination.	Average of monthly statements for year—(a)					
	1938–39.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
10s. .. ..	4,141	9,936	10,175	10,496	10,867	11,170
£1 .. .. .	21,124	69,038	69,646	70,564	72,384	69,704
£5 .. .. .	11,718	168,032	176,383	180,565	171,067	174,430
£10 .. .. .	5,126	91,911	101,443	113,809	131,569	135,967
£20 .. .. .	111	6	6	4	4	4
£50 .. .. .	1,259	51	49	46	44	42
£100 .. .. .	2,238	57	55	50	49	47
£1,000 .. ..	2,855	683	799	802	901	601
<i>Held by Banks</i> ..	15,454	38,996	40,880	42,909	44,433	45,490
<i>Held by Public</i> ..	33,118	300,718	317,676	333,427	342,452	346,475
<b>Total</b> .. ..	<b>48,572</b>	<b>339,714</b>	<b>358,556</b>	<b>376,336</b>	<b>386,885</b>	<b>391,965</b>

(a) Last Monday in month for 1938–39, last Wednesday in month for other years.

(iii) *Commonwealth Bank—Note Issue Department.* The following statement shows particulars of liabilities and assets of the Note Issue Department of the Commonwealth Bank as at 30th June, 1957 and 1958.

**NOTE ISSUE DEPARTMENT : LIABILITIES AND ASSETS, 30th JUNE.**

(£'000.)

Liabilities.	1957.	1958.	Assets.	1957.	1958.
Notes on Issue(a) ..	380,882	384,549	Gold and Balances held abroad (including money at short call)	137,427	133,382
Special Reserve—Premium on gold sold .. .. .	4,755	4,755	Government Securities (including Commonwealth Treasury Bills)	257,693	265,506
Other Liabilities(a) ..	9,540	9,640	Other Assets .. .. .	57	56
<b>Total Liabilities</b> ..	<b>395,177</b>	<b>398,944</b>	<b>Total Assets</b> .. ..	<b>395,177</b>	<b>398,944</b>

(a) Notes of a denomination not exceeding one pound which have been on issue for more than twenty years, and notes of a denomination exceeding one pound which have been on issue for more than 40 years are not included in the item "Notes on Issue" but are included in the item "Other Liabilities".

In 1957–58, the net profits of the Note Issue Department amounted to £12,592,626 and were paid to the Commonwealth Consolidated Revenue Fund.

**B. BANKING.**

**§ 1. Cheque-Paying Banks.**

1. *Banking Legislation.*—(i) *Commonwealth Legislation.* Under Section 51 of the Commonwealth Constitution, the Commonwealth Parliament has power to legislate with respect to "Banking, other than State banking; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money". The principal Commonwealth Acts at present in force relating to Banking are—

(a) The Commonwealth Bank Act 1945–1953, which provides for the constitution and management of the Commonwealth Bank, Commonwealth Trading Bank and Commonwealth Savings Bank and the management of the Australian note issue; and

- (b) The Banking Act 1945–1953, which provides for the regulation of banking and for the protection of the currency and the public credit of the Commonwealth.

The Banking Act 1945 was assented to on 3rd August, 1945, and came into operation on 21st August, 1945. It applies to all banks, except State banks, operating in Australia or Territories of the Commonwealth. The objects of the Act are :—(a) To provide a legal framework, uniform throughout Australia, for regulating the banking system ; (b) to safeguard depositors of the banks from loss ; (c) to provide for the co-ordination of banking policy under the direction of the Commonwealth Bank ; (d) to control the volume of credit in circulation and bank interest rates ; (e) to mobilize and to provide machinery for the control of the foreign exchange and gold resources of the Australian economy. A summary of the main provisions of the Act is given in Official Year Book No. 37, page 565.

The Banking Act 1953, assented to on 1st April, 1953, amended the Banking Act 1945. Details of the main amendments are given in Official Year Book No. 40, page 616.

(ii) *State Legislation.* State banking legislation relates to the incorporation of banks and the constitution and management of State banks. The Acts under which the various banks are incorporated differ. While some of the older banks were incorporated by special Act or Charter, e.g., the Bank of New South Wales by Act of Council 1817, The Bank of Adelaide by Act of the South Australian Parliament, and the Bank of New Zealand by Act of the General Assembly of New Zealand, most of the banks are incorporated under a Companies Act of the States or the United Kingdom. This is also the case with those banks which were reconstructed after the crisis of 1893. State banks, constituted under State Acts, transacting general banking business are The Rural Bank of New South Wales, the State Bank of South Australia and The Rural and Industries Bank of Western Australia.

2. *Royal Commission on Monetary and Banking Systems.*—A Royal Commission was appointed by the Commonwealth Government in November, 1935, to inquire into the monetary and banking systems in operation in Australia and to report whether any, and if so what, alterations were desirable in the interest of the people of Australia as a whole, and the manner in which any such alterations should be effected. The Commission presented its report on 15th July, 1937, and a summary of the recommendations appears in Official Year Book No. 31, page 1010.

3. *Presentation of Banking Statistics.*—Because of the different purposes they serve in the Australian financial system, Australian banks have been divided for statistical purposes into four groups and a separate series is presented for each. These groups are :—

(a) *The Commonwealth Bank.* This is the Central Bank. It also provides special banking facilities through the Rural Credits, Mortgage Bank and Industrial Finance Departments. It transacted general banking business through a General Banking Division up to 3rd December, 1953, when that business was transferred to the Commonwealth Trading Bank of Australia. Statistics of the Central Banking Business (including the Note Issue Department), and Rural Credits, Mortgage Bank and Industrial Finance Departments are presented in separate series.

(b) *The Commonwealth Trading Bank of Australia.* This bank commenced operations on 3rd December, 1953. On that date, under the provisions of the Commonwealth Bank Act, 1953, it took over the business of the General Banking Division of the Commonwealth Bank. The statistics presented in the Commonwealth Trading Bank series include averages for the General Banking Division of the Commonwealth Bank up to 3rd December, 1953.

(c) *Private Trading Banks.* This group was formerly known as the Nine Trading Banks but the number of banks included has been reduced to seven by amalgamations. With the Commonwealth Trading Bank, these banks provide the major part of the general banking facilities in Australia. The banks included in this group are—the Australia and New Zealand Bank Ltd. (an amalgamation of the Bank of Australasia Ltd. and the Union Bank of Australia Ltd.), The Bank of Adelaide, the Bank of New South Wales, The Commercial Bank of Australia Ltd., The Commercial Banking Company of Sydney Ltd., The English, Scottish and Australian Bank Ltd. and The National Bank of Australasia Ltd. (which has absorbed The Queensland National Bank Ltd. and The Ballarat Banking Co. Ltd.).

(d) *Other Banks.* This group consists of (i) three State Government Banks—The Rural Bank of New South Wales, the State Bank of South Australia and The Rural and Industries Bank of Western Australia, which, in their general banking business, specialize mainly in financing rural industries, (ii) one joint stock bank—The Brisbane Permanent Building and Banking Co. Ltd., which has specialized business in one district only, and (iii) branches of three overseas banks—the Bank of New Zealand, Comptoir National d'Escompte de Paris and the Bank of China, which transact limited business in Australia and are mainly concerned with financing trade, etc., between Australia and overseas countries.

In addition to the series mentioned above, a series for all cheque-paying banks is presented. This series covers the Commonwealth Trading Bank, the Private Trading Banks and the other cheque-paying banks included in the fourth group.

Unless otherwise stated, the statistics presented are averages of weekly returns. Averages of liabilities and assets are the averages of the liabilities and assets of the banks on the several weekly balance days during the period concerned. Averages of bank clearings and debits to customers' accounts are the averages of transactions for weeks ended on the balance days during the period.

4. *Banks Transacting Business in Australia.*—(i) *Number of Branches.* At 30th June, 1958, the 15 banks operating in Australia transacted all classes of banking business at 3,604 branches and 1,441 agencies. The Commonwealth Trading Bank and the Private Trading Banks have branches throughout the Commonwealth. The Rural Bank of New South Wales, the State Bank of South Australia and The Rural and Industries Bank of Western Australia, being State Government banks specializing mainly in financing rural industries, have branches only in their respective States. The Brisbane Permanent Building and Banking Co. Ltd., transacts business in Brisbane only. The remaining three banks are branches of overseas banks.

#### CHEQUE-PAYING BANKS : NUMBER OF BRANCHES(a) AT 30th JUNE, 1958

Banks.	New South Wales.	Victoria.	Q'land.	South Aust.	West. Aust.	Tasmania.	Nor. Terr.	Aust. Cap. Terr.	Australia.
Commonwealth Trading Bank of Australia ..	284	77	79	25	47	10	2	3	527
Private Trading Banks ..	946	858	475	277	235	65	9	11	2,876
Other Cheque-paying Banks	126	2	1	32	40	..	..	..	201
<b>All Cheque-paying Banks—</b>									
Metropolitan areas ..	548	449	124	149	131	15	..	..	1,416
Elsewhere ..	808	488	431	185	191	60	11	14	2,188
<b>Total ..</b>	<b>1,356</b>	<b>937</b>	<b>555</b>	<b>334</b>	<b>322</b>	<b>75</b>	<b>11</b>	<b>14</b>	<b>3,604</b>

(a) Includes Head Offices. Excludes 1,441 agencies.

(ii) *Capital Resources, Profits and Dividends.* The paid-up capital of cheque-paying banks (excluding the three overseas banks, the Bank of New Zealand, the Bank of China and the Comptoir National d'Escompte de Paris), together with their reserve funds, their profits and the amount of their last dividends, are shown in the following table. The information relates to the balance-sheet last preceding 31st October, 1957. All amounts are expressed in Australian currency.

**CHEQUE-PAYING BANKS : CAPITAL RESOURCES, PROFITS AND DIVIDENDS, 1956-57.**

(£'000.)

Bank.	Paid-up Capital. (a)	Reserve Funds.	Balance of Profit and Loss Account. (b)	Total Shareholders' Funds. (c)	Reserve Liability of Shareholders. (d)	Net Profit for year. (e)	Net Dividends. (f)
<i>Commonwealth Trading Bank of Australia</i> .. .. .	5,429	2,735	..	8,164	..	736	..
<i>Private Trading Banks—</i>							
<i>Australia and New Zealand Bank Ltd.</i> .. .. .	12,801	8,785	1,685	23,271	10,667	1,022	883
<i>The Bank of Adelaide</i> .. .. .	1,750	1,750	243	3,743	1,750	213	175
<i>Bank of New South Wales</i> .. .. .	17,560	12,000	1,293	30,853	17,560	1,978	1,580
<i>The Commercial Bank of Australia Ltd.</i> .. .. .	6,223	3,610	486	10,319	..	558	495
<i>The Commercial Banking Co. of Sydney Ltd.</i> .. .. .	6,000	6,500	525	13,025	6,000	635	540
<i>The English, Scottish and Australian Bank Ltd.</i> .. .. .	6,275	3,765	843	10,883	..	437	379
<i>The National Bank of Australasia Ltd.</i> .. .. .	10,089	7,500	1,020	18,609	2,700	927	908
<i>The Queensland National Bank Ltd. (in vol. liq.) (g)</i> .. .. .	..	..	130	130	..	..	..
<i>The Ballarat Banking Co. Ltd. (in vol. liq.) (g)</i> .. .. .	..	..	15	15	..	..	..
<i>Total Private Trading Banks</i>	60,698	43,910	6,240	110,848	38,677	5,770	4,960
<i>Other Cheque-paying Banks—</i>							
<i>The Brisbane Permanent Building and Banking Co. Ltd.</i> .. .. .	1,000	275	72	1,347	..	84	80
<i>The Rural Bank of New South Wales</i> .. .. .	15,935	10,857	..	26,792	..	112	..
<i>State Bank of South Australia</i> .. .. .	4,677	1,289	..	5,966	..	89	..
<i>The Rural and Industries Bank of Western Australia</i> .. .. .	8,414	250	..	8,664	..	29	..
<i>Total Other Cheque-paying Banks</i>	30,026	12,671	72	42,769	..	314	80
<b>Grand Total</b> .. .. .	<b>96,153</b>	<b>59,316</b>	<b>6,312</b>	<b>161,781</b>	<b>38,677</b>	<b>6,820</b>	<b>5,040</b>

(a) For the Commonwealth Trading Bank, the amount shown in this column is the amount specified as capital in the Commonwealth Bank Act 1945-1953. For the State Bank of South Australia and The Rural and Industries Bank of Western Australia, the amounts shown in this column are capital funds provided by the respective State Governments. Capital of The Rural Bank of New South Wales consists of Inscribed Stock and Debentures issued by the Bank for capital purposes. (b) Includes dividends declared but not paid at date of balance-sheet. (c) For the Commonwealth Trading Bank and the State Banks, the amount shown in this column is total capital and reserves. (See footnote (a).) (d) Includes uncalled capital. (e) For the State Government Banks, the net profit is the profit after writing off bank premises and payment of interest on capital. For the other Banks, the net profit is the profit before writing off bank premises. (f) Dividends paid and payable out of profits earned during 1956-57. (g) These banks are in process of liquidation consequent upon the amalgamation of their business with The National Bank of Australasia Ltd.

5. Commonwealth Bank of Australia.—(i) *General.* An account of the progress and development of the Commonwealth Bank is given in earlier issues of the Official Year Book (see No. 37, pp. 570 to 573). The general functions of the Bank are set out in section 8 of the Commonwealth Bank Act 1945-1953 which states—

“ 8. It shall be the duty of the Commonwealth Bank, within the limits of its powers, to pursue a monetary and banking policy directed to the greatest advantage of the people of Australia, and to exercise its powers under this Act and the Banking Act 1945 in such a manner as, in the opinion of the Bank, will best contribute to :—

(a) the stability of the currency of Australia ; (b) the maintenance of full employment in Australia ; and (c) the economic prosperity and welfare of the people of Australia.”

In addition to its functions as a Central Bank, the Bank controls the Australian note issue through a Note Issue Department and provides special services through the Rural Credits Department, Mortgage Bank Department and Industrial Finance Department. The Commonwealth Bank also provided general banking facilities through the General Banking Division up to 3rd December, 1953. On that date, in accordance with the provisions of the Commonwealth Bank Act, 1953, the Commonwealth Trading Bank took over the business of the General Banking Division of the Commonwealth Bank. The Commonwealth Savings Bank, a separate institution providing for small depositors, is controlled by the Commonwealth Bank Board and is operated in conjunction with the Commonwealth Trading Bank.

(ii) *Management.* Under the Commonwealth Bank Act 1911, the Bank was managed by a Governor. From 1924 to August, 1945, it was controlled by a Board of Directors. Under the Commonwealth Bank Act 1945, control was vested in a Governor, assisted by an Advisory Council. Since 21st August, 1951, under the Commonwealth Bank Act 1951, the policy of the Commonwealth Bank and the Commonwealth Savings Bank has been determined by the Commonwealth Bank Board consisting of the Governor (Chairman), the Deputy Governor, the Secretary to the Treasury and seven other members appointed by the Governor-General. The Bank is managed by the Governor who acts in accordance with the policy of the Bank and with any directions of the Board. The Board is required to inform the Government of the monetary and banking policy of the Bank. In the event of a disagreement between the Government and the Board as to whether the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia, the Governor-General, acting with the advice of the Executive Council, may determine the policy to be adopted by the Bank. The Commonwealth Trading Bank is managed by a General Manager under the Governor of the Commonwealth Bank and its policy is determined by the Commonwealth Bank Board.

(iii) *Central Banking Business.* Under the powers it possessed under the Commonwealth Bank Act 1911–1943, and under its war-time powers under the National Security Regulations, the Commonwealth Bank had gradually assumed the functions of a Central Bank. Part III. of the Commonwealth Bank Act 1945 formally constituted the Commonwealth Bank as a Central Bank and granted the Bank the necessary powers to carry on the business of a Central Bank. The capital for the Central Banking Business is £4,000,000 and such other sums as are transferred from the Reserve Fund. For the years ended 30th June, 1952 to 1956, the profits of the Commonwealth Bank were distributed as follows:—(a) One-half to the National Debt Sinking Fund; (b) £500,000 per annum to the Capital accounts of the several departments of the Bank and the Commonwealth Trading Bank (prior to 3rd December, 1953, the General Banking Division of the Commonwealth Bank) distributed as follows:—Commonwealth Trading Bank, Mortgage Bank Department, and Industrial Finance Department each two-sevenths and the Rural Credits Department one-seventh; and (c) the balance to the Commonwealth Bank Reserve Fund. Since 1956, the profits have been distributed one-half to the National Debt Sinking Fund and one-half to the Commonwealth Bank Reserve Fund.

(iv) *Note Issue Department.* This Department was established in 1920 when the control of the Australian note issue was transferred from the Commonwealth Treasury to the Commonwealth Bank. The Bank may, through this department, issue, re-issue and cancel Australian notes. Until June, 1951, all profits of this Department, with the exception of £2,000,000 and £1,200,000 paid to the capital accounts of the Rural Credits Department and Mortgage Bank Department respectively, were paid to the Consolidated Revenue Fund. For the years ended 30th June, 1952 to 1956, the profits were distributed as follows:—(a) £500,000 per annum to the capital accounts of the Commonwealth Trading Bank (prior to 3rd December, 1953 the General Banking Division of the Commonwealth Bank) and the several departments of the Commonwealth Bank, distributed two-sevenths each to the Commonwealth Trading Bank, Mortgage Bank Department and Industrial Finance Department and one seventh to the Rural Credits Department, and (b) the balance to the Commonwealth Consolidated Revenue Fund. Since 1956, the profits have been paid to the Commonwealth Consolidated Revenue Fund.

(v) *General Banking Division.* Under the Commonwealth Bank Act 1911–1943, no provision was made for the separation of the general banking business of the bank from its central banking business. Under the Commonwealth Bank Act 1945, the General Banking Division was set up to carry on the general banking business of the Bank and the accounts and transactions of this division were kept separate and distinct from the other accounts of the Bank. The capital of the General Banking Division was £4,000,000, and

such other sums as were transferred from the General Banking Division Reserve Fund, or from the profits of the Central Banking Business and the Note Issue Department. Transfers from these two sources increased the total capital to £4,572,000 at 30th June, 1953. The profits of the General Banking Division were distributed as follows:—(a) one-half was credited to the General Banking Division Reserve Fund, and (b) one-half was paid to the National Debt Sinking Fund. Under the Commonwealth Bank Act 1953, the business of the General Banking Division was transferred to the Commonwealth Trading Bank on 3rd December, 1953. (See also para. 6, p. 742, Commonwealth Trading Bank of Australia.)

(vi) *Rural Credits Department.* The Rural Credits Department was established in 1925 for the purpose of making short-term credit available for the orderly marketing of primary produce. The Bank may, through this department, make advances, upon the security of primary produce placed under the legal control of the Bank or other security associated with the production or marketing of primary produce, to co-operative associations or marketing boards formed under the laws of the Commonwealth or of a State or Territory of the Commonwealth or other bodies specified by proclamation. The period of the advance shall not be more than one year. The capital of the Rural Credits Department is £2,000,000 and such amounts as are transferred from the profits of the Central Banking Business and the Note Issue Department. At the 30th June, 1958, total capital was £2,714,000. Profits are distributed as follows:—(a) one-half is credited to the Rural Credits Department Reserve Fund, and (b) one-half is credited to the Rural Credits Department Development Fund for the promotion of primary production.

(vii) *Mortgage Bank Department.* The Mortgage Bank Department was established in 1943 for the purpose of making long-term loans to primary producers. Through this department, the Bank may make a loan to any person engaged in farming, agricultural, horticultural, pastoral or grazing operations or other form of primary production, upon the security of a mortgage to the Bank of an estate or interest in land in the Commonwealth owned by the borrower. The term of the loan shall not be less than five years nor more than forty-one years. The capital of the Department is £4,000,000 and such amounts as are transferred from the profits of the Central Banking Business and the Note Issue Department. Total capital at the 30th June, 1958, amounted to £5,428,000. Profits are credited to the Mortgage Bank Department Reserve Fund.

(viii) *Industrial Finance Department.* The functions of the Industrial Finance Department, established in January, 1946, are:—(a) to provide finance for the establishment and development of industrial undertakings; (b) to assist in the establishment and development of industrial undertakings; and (c) to provide advice on the operations of industrial undertakings with a view to promoting the efficient organization and conduct thereof. To exercise these functions the Bank may, through the Industrial Finance Department, lend money and purchase and sell shares or securities in an industrial undertaking. The capital of this department is £4,000,000 and such amounts as are transferred from the profits of the Central Banking Business and the Note Issue Department. At 30th June, 1958, total capital amounted to £5,429,000. The Treasurer, the Bank and the Savings Bank may advance money to the Industrial Finance Department. The amount that may be advanced by the Bank is limited to £1,000,000. The profits of the Department are credited to the Industrial Finance Department Reserve Fund.

(ix) *Housing Loans.* Provision is made for the Bank, through the Commonwealth Trading Bank, to make loans to individuals or building societies for the erection or purchase of homes or for the discharge of mortgages on homes. These loans must be made at the lowest possible rate of interest. Loans to individuals are to be on *crédit foncier* terms, to be secured by first mortgage on an estate or interest in land owned by the borrower and to be repaid in periods of not less than five years nor more than 35 years. Loans to building societies are to be made on such security and on such terms and conditions as the Bank determines.

(x) *Liabilities and Assets—All Departments.* Liabilities and assets of each Department of the Commonwealth Bank at 30th June, 1958, are shown in the following table. The

Commonwealth Trading Bank and the Commonwealth Savings Bank, which are operated as separate institutions, are not included (*see* § 1, para. 6 (ii) and § 2, para. 10 (ii) following):—

**COMMONWEALTH BANK OF AUSTRALIA : LIABILITIES AND ASSETS,**  
30th JUNE, 1958.  
(£'000.)

Item.	Central Banking Business.	Note Issue Department.	Rural Credits Department.	Mortgage Bank Department.	Industrial Finance Department.	Total.(a)
<b>LIABILITIES.</b>						
Capital .. .. .	4,000	..	2,714	5,428	5,429	17,571
Reserve Funds .. .. .	18,772	..	1,217	724	3,321	24,034
Special Reserve—Premium on gold sold .. .. .	..	4,755	..	..	..	4,755
Development Fund .. .. .	..	..	112	..	..	112
Notes on issue .. .. .	..	384,549	..	..	..	384,549
Deposits, bills payable and other liabilities—						
Special Accounts of Trading Banks	275,159	..	..	..	..	275,159
Other deposits of Trading Banks	28,245	..	..	..	..	28,245
Other (including provision for contingencies) .. .. .	248,257	9,640	31,025	889	21,988	284,065
<i>Total Liabilities</i> .. .. .	<i>574,433</i>	<i>398,944</i>	<i>35,068</i>	<i>7,041</i>	<i>30,738</i>	<i>1,018,490</i>
<b>ASSETS.</b>						
Gold and balances held abroad (including money at short call) .. .. .	298,201	133,382	..	..	..	431,583
Australian notes and coin and cash balances .. .. .	2,552	..	..	66	183	2,801
Cheques and bills of other banks .. .. .	8,129	..	..	..	..	8,129
Commonwealth Government securities (including Commonwealth Treasury Bills) .. .. .	174,796	265,506	..	1,135	4,206	445,643
Securities of other Governments, and of local and semi-governmental authorities .. .. .	47,404	..	..	..	..	47,404
Bills receivable and remittances in transit .. .. .	8,780	..	..	..	..	8,780
Bank premises at cost less amounts written off .. .. .	591	..	..	..	..	591
Loans, advances, bills discounted, and other assets (after deducting debts considered bad or doubtful) .. .. .	33,980	56	35,068	5,840	26,349	73,559
<i>Total Assets</i> .. .. .	<i>574,433</i>	<i>398,944</i>	<i>35,068</i>	<i>7,041</i>	<i>30,738</i>	<i>1,018,490</i>

(a) Inter-departmental accounts totalling £27,734,000 have been offset in the combined figures.

(xi) *Profits.* Net profits of the various Departments of the Commonwealth Bank for the years ended 30th June, 1939 and 1954 to 1958, were as follows :—

**COMMONWEALTH BANK OF AUSTRALIA : NET PROFITS.**  
(£'000.)

Year ended 30th June—	General Bank Department.	Central Banking Business. (a)	Note Issue Department.	Rural Credits Department.	Mortgage Bank Department. (b)	Indus- trial Finance Department. (c)	Total.
1939 .. .. .	356	..	767	32	..	..	1,155
1954 .. .. .	..	3,918	6,207	171	59	346	10,701
1955 .. .. .	..	4,518	6,017	192	65	398	11,190
1956 .. .. .	..	6,561	8,366	220	75	416	15,638
1957 .. .. .	..	8,741	10,053	195	95	386	19,470
1958 .. .. .	..	10,103	12,593	184	110	405	23,395

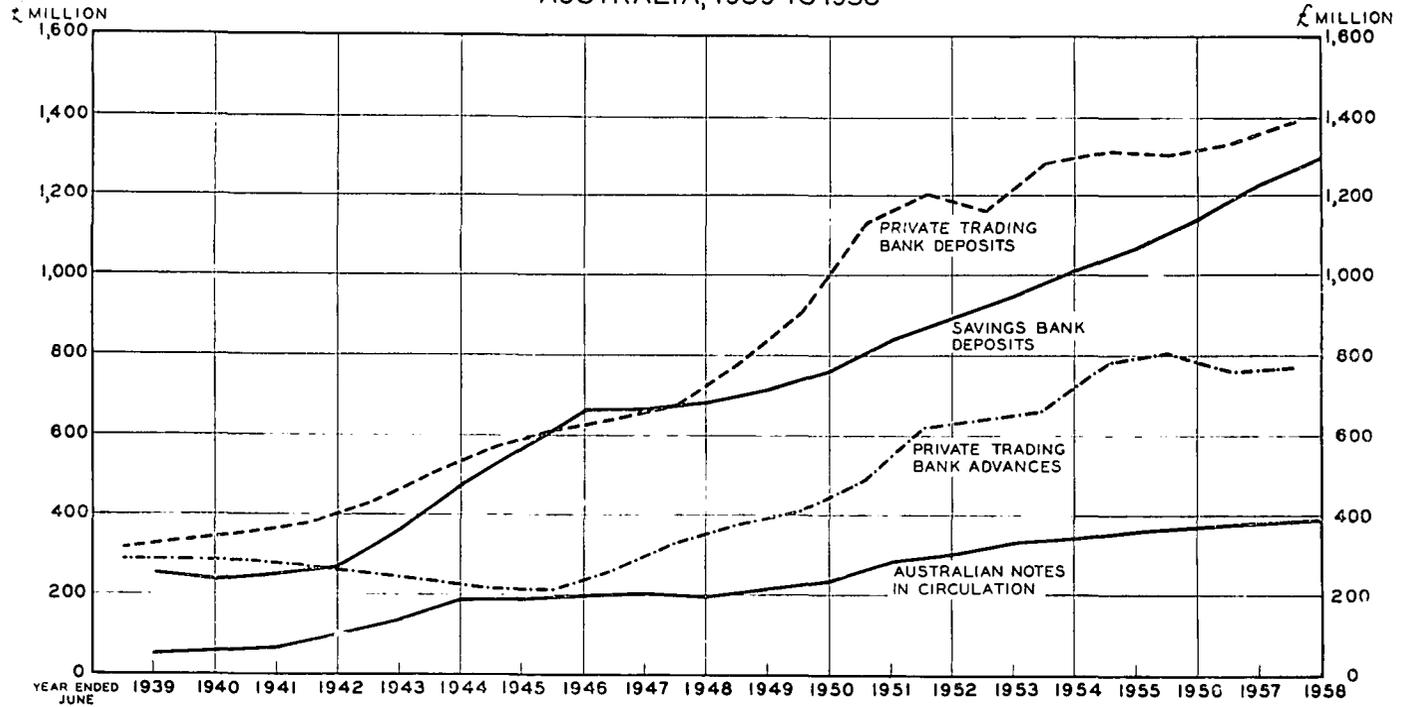
(a) Created 21st August, 1945.  
business 27th September, 1943.

Previously part of General Bank Department.  
(c) Commenced business 2nd January, 1946.

(b) Commenced

# BANK DEPOSITS AND ADVANCES AND NOTES IN CIRCULATION

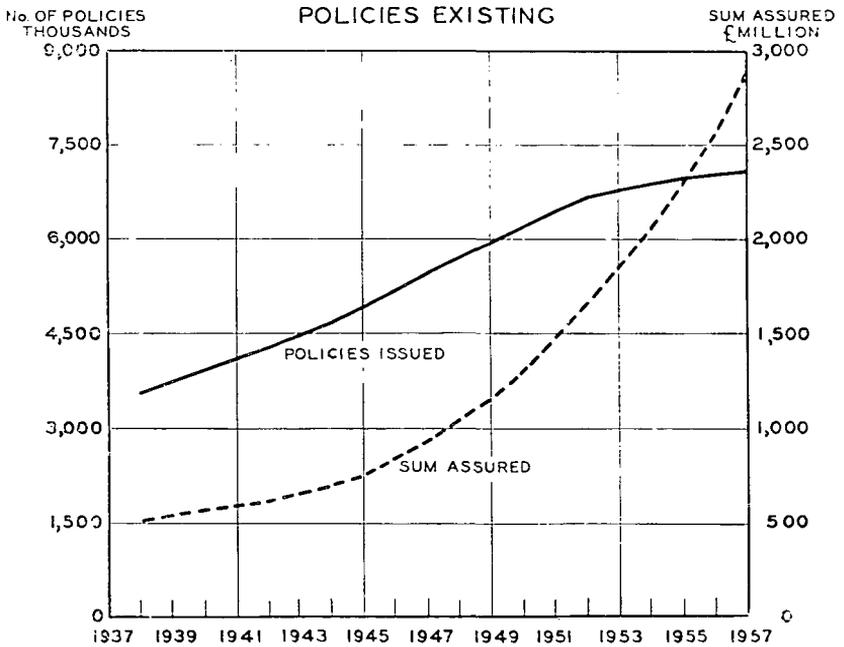
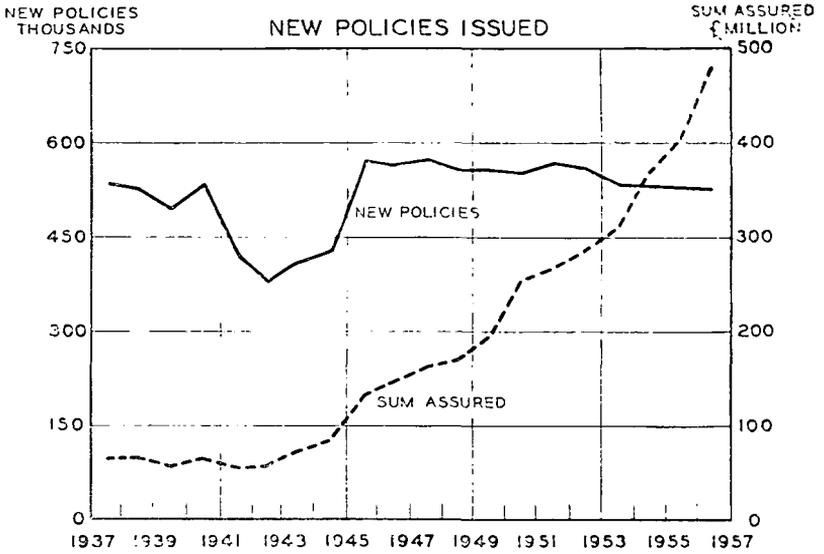
AUSTRALIA, 1939 TO 1958



## LIFE ASSURANCE: AUSTRALIA

1938 TO 1957

## POLICIES ISSUED AND SUM ASSURED



The distribution of these profits for the years ended 30th June, 1954 to 1958, is given in the following table :—

**COMMONWEALTH BANK OF AUSTRALIA : DISTRIBUTION OF PROFITS.**  
(£'000.)

To—	1954.	1955.	1956.	1957.	1958
National Debt Sinking Fund	1,959	2,259	3,280	4,371	5,052
Commonwealth Consolidated Revenue Fund .. ..	5,707	5,517	7,866	10,054	12,593
Commonwealth Trading Bank Capital Account .. ..	285	286	286	..	..
Commonwealth Bank Reserve Fund .. ..	1,459	1,759	2,780	4,370	5,051
Rural Credits Department—					
Capital Account .. ..	143	142	143	..	..
Reserve Fund .. ..	85	96	110	97	92
Development Fund .. ..	86	96	110	97	92
Mortgage Bank Department—					
Capital Account .. ..	286	286	286	..	..
Reserve Fund .. ..	59	65	75	95	110
Industrial Finance Department—					
Capital Account .. ..	286	286	286	..	..
Reserve Fund .. ..	346	398	416	386	405
<b>Total .. ..</b>	<b>10,701</b>	<b>11,190</b>	<b>15,638</b>	<b>19,470</b>	<b>23,395</b>

(xii) *Central Banking Business—Average Liabilities and Assets.* The average liabilities and assets of the Central Banking Business and Note Issue Department of the Commonwealth Bank for the years ended June, 1954 to 1958, are shown in the two tables which follow.

**COMMONWEALTH BANK OF AUSTRALIA : CENTRAL BANKING BUSINESS (INCLUDING NOTE ISSUE DEPARTMENT)—AVERAGE LIABILITIES.**  
(£'000.)

Year ended June—	Capital and Reserve Funds.	Notes on Issue.	Special Accounts of Trading Banks.	Other Deposits of Trading Banks.	Other Liabilities.	Total Liabilities.
1954 .. ..	11,906	338,223	306,820	41,731	(a)283,397	982,077
1955 .. ..	13,279	357,023	306,286	36,795	243,468	956,851
1956 .. ..	14,945	374,096	272,841	35,630	208,717	906,229
1957 .. ..	17,559	383,214	289,444	31,345	205,917	927,479
1958 .. ..	21,618	389,544	328,337	25,602	218,393	983,494

(a) Includes special deposit of General Banking Division £14,265,000.

**COMMONWEALTH BANK OF AUSTRALIA : CENTRAL BANKING BUSINESS (INCLUDING NOTE ISSUE DEPARTMENT)—AVERAGE ASSETS.**  
(£'000.)

Year ended June—	Gold and Balances held Abroad.	Australian Coin.	Cheques and Bills of other Banks.	Government and other Securities (including Commonwealth Treasury Bills).	Bills Receivable and Remittances in Transit.	Other Assets.	Total Assets.
1954 .. ..	512,615	2,105	6,895	407,979	2,514	49,969	982,077
1955 .. ..	415,896	2,380	7,009	459,839	3,488	68,239	956,851
1956 .. ..	298,885	2,364	6,505	515,716	3,746	79,013	906,229
1957 .. ..	349,663	1,892	5,360	508,841	3,805	57,918	927,479
1958 .. ..	461,721	2,026	4,177	478,603	4,488	32,479	983,494

6. **Commonwealth Trading Bank of Australia.**—(i) *General.* The Commonwealth Trading Bank was established by the Commonwealth Bank Act, 1953, and on 3rd December, 1953, took over the business of the General Banking Division of the Commonwealth Bank. The Commonwealth Trading Bank is a body corporate with its own General Manager who is appointed by the Governor-General on the recommendation of the Commonwealth Bank Board for a term of seven years. The General Manager, under the Governor of the Commonwealth Bank, is responsible for the administration of the Commonwealth Trading Bank in accordance with policy determined by the Commonwealth Bank Board. Under the Banking Act 1945–1953, the Commonwealth Trading Bank is subject to the same central banking controls as the private trading banks and is required to maintain a Special Account with the Commonwealth Bank on the same basis as those of the private trading banks. The capital of the Commonwealth Trading Bank consists of the capital of the General Banking Division of the Commonwealth Bank immediately before 3rd December, 1953, certain sums provided out of profits of the Commonwealth Bank during the years ended 30th June, 1953 to 1956, and such other sums as are transferred from the Commonwealth Trading Bank Reserve Fund. The net profits of the Commonwealth Trading Bank are divided as follows :—(a) one-half placed to the credit of the Commonwealth Trading Bank Reserve Fund, and (b) one-half paid into the National Debt Sinking Fund.

(ii) *Liabilities and Assets.* The liabilities and assets of the Commonwealth Trading Bank at 30th June, 1957 and 1958, are shown in the following table:—

**COMMONWEALTH TRADING BANK OF AUSTRALIA : LIABILITIES AND ASSETS, 30th JUNE.**  
(£'000.)

Liabilities.	1957.	1958.	Assets.	1957.	1958.
Capital .. ..	5,429	5,429	Coin, bullion, notes and cash at bankers ..	16,069	16,181
Reserve Fund ..	2,735	2,996	Money at short call in London .. ..	1,875	1,750
Deposits, bills payable and other liabilities (including provision for contingencies) ..	243,253	271,889	Special Account with Commonwealth Bank	39,150	37,650
Balances due to other banks .. ..	646	876	Cheques and bills of other banks and balances with and due from other banks	3,064	3,726
			Australian Public Securities—		
			Commonwealth and States—		
			Treasury Bills ..	8,000	10,000
			Other Securities ..	38,615	46,748
			Local and Semi-Governmental Authorities ..	..	1,298
			Bills receivable and remittances in transit	31,488	38,000
			Bank premises (at cost less amounts written off) .. ..	4,051	4,398
			Loans, advances and bills discounted (after deducting provision for debts considered bad or doubtful) ..	106,252	117,985
			Other assets ..	3,499	3,454
<b>Total .. ..</b>	<b>252,063</b>	<b>281,190</b>	<b>Total .. ..</b>	<b>252,063</b>	<b>281,190</b>

(iii) *Average Liabilities and Assets within Australia.* The average liabilities and assets within Australia of the Commonwealth Trading Bank for the years ended 30th June, 1954 to 1958, are shown in the following tables.

**COMMONWEALTH TRADING BANK OF AUSTRALIA—AVERAGE LIABILITIES WITHIN AUSTRALIA.(a)**  
(£'000.)

Year ended June—	Deposits.			Balances due to other Banks.	Bills payable and all other Liabilities to the Public.	Total Liabilities.
	Not Bearing Interest.	Bearing Interest.	Total.			
1954 .. .. .	120,885	35,352	156,237	2,034	11,766	170,037
1955 .. .. .	130,909	43,549	174,458	309	16,148	190,915
1956 .. .. .	135,617	46,243	181,860	314	17,496	199,670
1957 .. .. .	140,125	44,423	184,548	389	18,160	203,097
1958 .. .. .	150,220	54,837	205,057	422	19,523	225,002

(a) Includes Territories of Papua and New Guinea.

**COMMONWEALTH TRADING BANK OF AUSTRALIA—AVERAGE ASSETS WITHIN AUSTRALIA.(a)**  
(£'000.)

Year ended June—	Cash and Cash Balances.	Special Account with Commonwealth Bank.	Balances with other Banks. (b)	Commonwealth and State Government Securities.		Other Securities.	Loans, Advances, and Bills Discounted.	All other Assets.	Total Assets.
				Treasury Bills.	Other.				
1954 .. .. .	11,000	34,800	787	23,404	29,924	1,284	69,204	4,360	174,763
1955 .. .. .	10,456	36,061	870	12,260	38,165	1,606	89,138	5,675	194,231
1956 .. .. .	10,213	33,155	1,238	6,333	38,599	1,824	103,894	6,815	202,071
1957 .. .. .	9,988	34,603	1,469	4,059	35,714	2,654	106,480	7,305	202,272
1958 .. .. .	10,829	40,193	1,596	5,500	47,278	2,511	107,815	7,594	223,316

(a) Includes Territories of Papua and New Guinea. (b) Includes notes, cheques and bills of other banks.

(iv) *Profits.* The net profits (after writing off bank premises, £135,060 in 1957 and £148,960 in 1958) of the Commonwealth Trading Bank for the years ended 30th June, 1957 and 1958, were £600,888 and £520,262 respectively. These net profits were distributed one half to the National Debt Sinking Fund and one half to the Commonwealth Trading Bank Reserve Fund.

7. *Private Trading Banks.*—(i) *Average Liabilities and Assets in Australia.* The average liabilities and assets within Australia of the Private Trading Banks (see p. 734 for list of banks) for the years ended June, 1939 and 1954 to 1958, are shown in the following tables:—

**PRIVATE TRADING BANKS : AVERAGE LIABILITIES WITHIN AUSTRALIA.**  
(£'000.)

Year ended June—	Inter-minable Deposits or Deposit Stock.	Deposits.			Notes in Circulation.	Balances due to other Banks.	Bills payable and all other Liabilities to the Public.	Total Liabilities.
		Not Bearing Interest.	Bearing Interest.	Total.				
1939 .. .. .	2,644	118,868	198,793	317,661	167	921	(b) 3,005	324,398
1954 .. .. .	14	1,035,707	239,774	1,275,481	158	3,360	14,980	1,293,993
1955 .. .. .	9	1,047,677	262,986	1,310,663	158	3,282	16,432	1,330,544
1956 .. .. .	6	1,032,332	263,107	1,295,439	158	6,528	16,913	1,319,044
1957 .. .. .	6	1,028,509	299,499	1,328,008	158	7,343	18,685	1,354,200
1958 .. .. .	6	1,045,881	345,415	1,391,296	157	5,561	18,505	1,415,525

(a) Includes other Liabilities.

(b) Excludes other Liabilities.

**PRIVATE TRADING BANKS : AVERAGE ASSETS WITHIN AUSTRALIA.**  
(£'000.)

Year ended June—	Cash and Cash Balances.	Special Account with Commonwealth Bank.	Balances with Other Banks. (a)	Commonwealth and State Government Securities.		Other Securities. (b)	Loans, Advances and Bills Discounted.	All other Assets.	Total Assets.
				Treasury Bills.	Other.				
1939.. ..	33,597	..	3,938	21,533	(c)20,477	(d)	e 288,109	(f)9,421	377,075
1954.. ..	71,244	285,226	17,346	99,368	127,616	6,278	658,534	36,549	1,302,161
1955.. ..	66,908	269,117	18,436	51,602	120,239	5,113	776,762	48,925	1,357,102
1956.. ..	66,883	238,803	19,672	50,015	113,121	6,695	804,392	56,042	1,355,623
1957.. ..	63,661	254,052	20,239	51,162	151,298	7,946	762,638	58,363	1,369,359
1958.. ..	59,805	287,399	18,254	39,027	176,152	13,284	774,302	62,794	1,431,017

(a) Includes notes, cheques and bills of other banks. (b) Includes Local and Semi-Governmental securities. (c) Includes municipal securities. (d) Included with loans, advances and bills discounted. (e) See footnotes (d) and (f). (f) Landed and house property only. Other assets included with loans, advances and bills discounted.

(ii) *Ratios of Assets and Liabilities to Total Deposits.* The following table shows, for the Private Trading Banks, the ratios of certain assets and liabilities to total deposits for the years ended June, 1939 and 1954 to 1958. The ratios are based on the average liabilities and assets for the years shown.

**PRIVATE TRADING BANKS : RATIOS OF AVERAGE ASSETS AND LIABILITIES TO AVERAGE TOTAL DEPOSITS.**

(Per cent.)

Year ended June—	Cash and Cash Balances.	Commonwealth and State Government Securities.		Special Account with Commonwealth Bank.	Advances.	Deposits.	
		Treasury Bills.	Other.			Not Bearing Interest.	Bearing Interest.
1939 .. ..	10.6	6.8	(a) 6.5	..	90.7	37.4	62.6
1954 .. ..	5.6	7.8	10.0	22.4	51.6	81.2	18.8
1955 .. ..	5.1	3.9	9.2	20.5	59.3	79.9	20.1
1956 .. ..	5.2	3.9	8.7	18.4	62.1	79.7	20.3
1957 .. ..	4.8	3.9	11.4	19.1	57.4	77.5	22.5
1958 .. ..	4.3	2.8	12.7	20.7	55.7	75.2	24.8

(a) Includes municipal securities.

(iii) *Proportion of Non-Interest Bearing to Total Deposits.* The following table shows, for each State, the proportion of non-interest bearing deposits to total deposits with the Private Trading Banks for each of the years ended June, 1939 and 1954 to 1958. The ratios are based on the average deposits for the years shown.

**PRIVATE TRADING BANKS : PROPORTION OF NON-INTEREST BEARING DEPOSITS TO TOTAL DEPOSITS.**

(Per cent.)

Year ended June—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia. (a)
1939 .. ..	43.5	30.3	45.4	26.1	45.7	36.5	61.1	23.2	37.4
1954 .. ..	83.9	79.6	82.7	72.3	83.1	79.7	89.5	88.2	81.2
1955 .. ..	81.9	78.1	82.6	71.6	84.1	80.1	88.7	89.6	79.9
1956 .. ..	81.6	78.6	81.3	71.2	82.3	79.8	86.5	88.1	79.7
1957 .. ..	79.1	76.5	80.1	69.4	77.6	79.7	82.6	79.8	77.5
1958 .. ..	76.5	74.3	78.5	67.1	75.8	77.4	79.8	78.7	75.2

(a) Includes Papua and New Guinea for 1954 and following years.

(iv) *Ratio of Advances to Total Deposits.* The ratio of advances to total deposits for each State for the years ended June, 1939 and 1954 to 1958, is shown in the following table. The ratios are based on the averages of deposits and advances for the years shown.

**PRIVATE TRADING BANKS: RATIO OF ADVANCES TO TOTAL DEPOSITS.**  
(Per cent.)

Year ended June—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia. (a)
1939 .. ..	104.5	71.6	99.2	77.6	155.5	57.0	24.5	37.7	90.7
1954 .. ..	56.4	47.8	59.7	32.2	52.7	57.3	30.0	35.6	51.6
1955 .. ..	66.1	51.8	68.5	37.2	71.6	61.9	55.8	49.5	59.3
1956 .. ..	71.6	53.4	67.8	39.0	78.4	60.1	59.5	43.9	62.1
1957 .. ..	67.1	48.9	63.0	36.1	68.7	54.7	47.4	40.3	57.4
1958 .. ..	63.8	47.7	61.0	36.7	71.2	53.1	43.1	40.5	55.7

(a) Includes Papua and New Guinea for 1954 and following years.

8. *Other Cheque-paying Banks.—Average Liabilities and Assets within Australia.* The average liabilities and assets within Australia of "Other Cheque-paying Banks" (see p. 734 for list of these banks) for the years ended June, 1954 to 1958, are shown in the following tables.

**OTHER CHEQUE-PAYING BANKS: AVERAGE LIABILITIES WITHIN AUSTRALIA.**  
(£'000.)

Year ended June—	Inter-terminable Deposits or Deposit Stock. (a)	Deposits.			Notes in Circulation.	Balances due to other Banks.	Bills payable and all other Liabilities to the Public.	Total Liabilities.
		Not Bearing Interest.	Bearing Interest.	Total.				
1954 .. ..	19,734	39,408	15,309	54,717	..	664	454	75,569
1955 .. ..	20,520	41,415	16,069	57,484	..	554	461	79,019
1956 .. ..	20,569	39,726	16,359	56,085	..	1,536	484	78,674
1957 .. ..	20,472	41,317	16,946	58,263	..	1,372	586	80,693
1958 .. ..	20,724	42,013	20,311	62,324	..	1,384	790	85,222

(a) Inscribed stock and debentures, Rural Bank of New South Wales and State Bank of South Australia.

**OTHER CHEQUE-PAYING BANKS: AVERAGE ASSETS WITHIN AUSTRALIA**  
(£'000.)

Year ended June—	Cash and Cash Balances.	Special Account with Commonwealth Bank.	Balances with other Banks. (a)	Commonwealth and State Government Securities.		Other Securities. (b)	Loans, Advances and Bills Discounted.	All other Assets. (c)	Total Assets.
				Treasury Bills.	Other.				
1954 .. ..	5,091	1,090	2,409	7,326	13,240	1,169	65,982	3,815	100,122
1955 .. ..	4,586	1,108	2,198	5,641	13,295	1,378	72,189	4,923	105,318
1956 .. ..	3,992	883	1,588	4,119	13,816	817	75,825	5,332	106,372
1957 .. ..	3,857	788	2,267	3,906	15,068	825	77,697	5,599	110,007
1958 .. ..	3,804	745	2,512	4,145	14,532	1,283	81,149	6,192	114,362

(a) Includes notes, cheques and bills of other banks. (b) Includes Local and Semi-Governmental Securities. (c) Includes The Rural and Industries Bank of Western Australia and State Bank of South Australia accounts with State Treasuries.

9. *All Cheque-paying Banks.—Average Liabilities and Assets within Australia.* Particulars of the average liabilities and assets within Australia of all cheque-paying banks in Australia (see p. 734 for list of banks) for the years ended 30th June, 1954 to 1958, are shown in the following tables.

**ALL CHEQUE-PAYING BANKS : AVERAGE LIABILITIES WITHIN AUSTRALIA.(a)**  
(£'000.)

Year ended June—	Inter-minable Deposits or Deposit Stock.	Deposits.			Notes in Circulation.	Balances due to other Banks.	Bills payable and all other liabilities to the Public.	Total Liabilities.
		Not Bearing Interest.	Bearing Interest.	Total.				
1954 .. ..	19,748	1,196,000	290,435	1,486,435	158	6,058	27,200	1,539,599
1955 .. ..	20,529	1,220,001	322,604	1,542,605	158	4,145	33,041	1,600,478
1956 .. ..	20,575	1,207,675	325,709	1,533,384	158	8,378	34,893	1,597,388
1957 .. ..	20,478	1,209,951	360,868	1,570,819	158	9,104	37,431	1,637,990
1958 .. ..	20,730	1,238,114	420,563	1,658,677	157	7,367	38,818	1,725,749

(a) Includes Territories of Papua and New Guinea.

**ALL CHEQUE-PAYING BANKS : AVERAGE ASSETS WITHIN AUSTRALIA.(a)**  
(£'000.)

Year ended June—	Cash and Cash Balances.	Special Account with Commonwealth Bank.	Balances with other Banks.	Commonwealth and State Government Securities.		Other Securities. (b)	Loans, Advances and Bills Discounted.	All Other Assets.	Total Assets.
				Treasury Bills.	Other.				
1954 .. ..	87,335	321,116	20,542	130,098	170,780	8,731	793,720	44,724	1,577,046
1955 .. ..	81,950	306,286	21,504	69,503	171,699	8,097	938,089	59,523	1,656,651
1956 .. ..	81,088	272,841	22,498	60,467	165,536	9,336	984,111	68,189	1,664,066
1957 .. ..	77,506	289,443	23,975	59,127	202,080	11,425	946,815	71,267	1,681,638
1958 .. ..	74,438	328,337	22,362	48,672	237,160	17,880	963,266	76,580	1,768,695

(a) Includes Territories of Papua and New Guinea.

(b) Includes Local and Semi-Governmental securities.

10. **Commonwealth and Private Trading Banks (Major Trading Banks).**—(i) *Selected Average Assets and Liabilities within Australia.* In the following tables, particulars of selected average assets and liabilities of the Commonwealth and Private Trading Banks are shown for each of the years ended June, 1954 to 1958.

**COMMONWEALTH AND PRIVATE TRADING BANKS : SELECTED AVERAGE ASSETS AND LIABILITIES WITHIN AUSTRALIA.(a)**  
(£'000.)

Year ended June—	Cash and Cash Balances. (b)	Commonwealth and State Government Securities.		Special Account with Commonwealth Bank.	Advances.	Total Deposits.	
		Treasury Bills.	Other.			Not Bearing Interest.	Bearing Interest.
1954 .. ..	82,244	122,772	157,540	320,026	727,738	1,156,592	275,126
1955 .. ..	77,364	63,862	158,404	305,178	865,900	1,178,586	306,535
1956 .. ..	77,096	56,348	151,720	271,958	908,286	1,167,949	309,350
1957 .. ..	73,649	55,221	187,012	288,655	869,118	1,168,634	343,922
1958 .. ..	70,634	44,527	222,628	327,592	882,117	1,196,101	400,252

(a) Includes Territories of Papua and New Guinea.

(b) Coin, bullion, notes and cash with Commonwealth Bank on current account.

(ii) *Ratios of Selected Assets within Australia to Total Deposits.* In the table below, ratios of selected assets to deposits are given for each of the years ended June, 1954 to 1958.

COMMONWEALTH AND PRIVATE TRADING BANKS: RATIOS OF SELECTED ASSETS WITHIN AUSTRALIA<sup>(a)</sup> TO TOTAL DEPOSITS.<sup>(b)</sup>

(Per Cent.)

Year Ended June—	Cash and Cash Balances. (c)	Commonwealth and State Government Securities.		Special Account with Commonwealth Bank.	Advances.	Total Deposits.	
		Treasury Bills.	Other.			Not Bearing Interest.	Bearing Interest.
1954 .. ..	5.7	8.6	11.0	22.4	50.8	80.8	19.2
1955 .. ..	5.2	4.3	10.7	20.6	58.3	79.4	20.6
1956 .. ..	5.2	3.8	10.3	18.4	61.5	79.1	20.9
1957 .. ..	4.9	3.6	12.4	19.1	57.5	77.3	22.7
1958 .. ..	4.4	2.8	14.0	20.5	55.3	74.9	25.1

(a) Includes Territories of Papua and New Guinea. (b) Based on averages of assets and liabilities for the years shown. (c) Coin, bullion, notes and cash with Commonwealth Bank on current account.

11. Classification of Advances within Australia—Commonwealth Trading Bank of Australia and Private Trading Banks (Major Trading Banks).—(i) *States, June, 1958.* A classification of bank advances made by the Commonwealth and Private Trading Banks at the end of June, 1958, is shown in the following table.

Resident borrowers cover institutions (including branches of oversea institutions) engaged in business in Australia and persons permanently residing in Australia. Non-resident borrowers cover all other persons and institutions incorporated abroad, which though represented, do not carry on business in Australia. Advances to resident borrowers have been classified as business advances, advances to public authorities, personal advances and advances to non-profit organizations. Business advances have been further classified to the main industry of the borrower and include advances to partnerships, companies and other institutions engaged in business in Australia, advances to persons actively engaged in business on their own behalf if the advance is mainly for business purposes, advances to mutual, co-operative and benefit societies which distribute their profits or surpluses (if any) to members by way of dividends, rebates on charges for goods and services or increased benefits. Advances to public authorities cover advances to local and semi-governmental authorities including separately constituted government business undertakings but not the Commonwealth or State Governments. Personal advances cover advances to persons for purposes other than carrying on a business. Advances to non-profit organizations cover advances to organizations which are not carried on for the purpose of making a profit or gain to individual members, any income of the organization being used for the purposes of the organization or for the benefit of the community.

Commencing with the June, 1957, survey, the classification used in previous surveys was revised and because of changes in definition and regrouping of some classes, a complete review of the classification of all accounts was necessary. The main changes made in the classification were (a) the provision of separate classes for advances to non-residents and non-profit organizations and (b) changes in the definition of and grouping of several industrial classes. The main changes under (b) were:—

*Manufacturing.*—This class now includes motor repairs previously included in the class, Transport, Storage and Communication.

*Finance.*—This class was previously Finance and Property. The previous sub-class (i), Builders and Contractors, has been transferred to a new class 6, Building and Construction. The sub-class (ii), Building Investment Companies and Housing Societies, has been restricted to Building and Housing Societies (Building Investment Companies are included in class 7, Other Businesses) and the sub-class (iii), Other (Banking and Insurance, etc.), has been restricted to financial institutions only. Business services (e.g., Stock Brokers, Estate Agencies, etc.) previously included in this sub-class have been transferred to the class 7, Other Businesses. Holding companies also previously included are now classified to the main industry of their subsidiary companies.

*Commerce.*—The sub-class, Retail Trade, now includes motor garages and service stations previously included in the class, Transport, Storage and Communication.

These revisions should be noted when comparing the figures for June, 1957, and subsequent periods with those for earlier periods.

COMMONWEALTH TRADING BANK OF AUSTRALIA AND PRIVATE TRADING BANKS : CLASSIFICATION OF ADVANCES WITHIN AUSTRALIA(a)—STATES, END OF JUNE, 1958.

(£'000.)

Classification.	N.S.W. (b)	Vic.	Q'land (a)	S. Aust. (c)	W. Aust.	Tas.	Aust- ralia. (a)	Pro- portion of Total (Per cent.)
<i>Resident Borrowers.</i>								
<b>A. BUSINESS ADVANCES CLASSIFIED ACCORDING TO MAIN INDUSTRY OF BORROWER.</b>								
1. Agriculture, Dairying and Grazing ..	94,094	43,701	56,419	13,721	18,744	4,297	230,976	24.0
2. Manufacturing ..	76,688	64,463	24,182	9,190	6,536	3,521	184,580	19.2
3. Transport, Storage and Communication ..	4,478	4,915	2,200	1,503	1,113	437	14,646	1.5
4. Finance—								
(i) Building and Housing Societies ..	11,972	11,829	1,884	282	209	326	26,502	2.8
(ii) Other ..	16,404	15,072	4,961	2,260	1,355	530	40,582	4.2
<i>Total Class 4 ..</i>	<i>28,376</i>	<i>26,901</i>	<i>6,845</i>	<i>2,542</i>	<i>1,564</i>	<i>856</i>	<i>67,084</i>	<i>7.0</i>
5. Commerce —								
(i) Retail Trade ..	39,548	27,339	14,500	6,804	7,894	3,515	99,600	10.3
(ii) Wholesale Trade(d)	47,687	32,345	5,525	8,780	6,032	2,301	102,670	10.7
<i>Total Class 5 ..</i>	<i>87,235</i>	<i>59,684</i>	<i>20,025</i>	<i>15,584</i>	<i>13,926</i>	<i>5,816</i>	<i>202,270</i>	<i>21.0</i>
6. Building and Construction ..	10,720	7,510	3,163	1,363	1,503	850	25,109	2.6
7. Other Businesses ..	22,829	16,313	11,404	3,518	4,810	1,355	60,229	6.3
8. Unclassified ..	1,581	1,814	438	140	231	398	4,602	0.5
<i>Total Business Advances ..</i>	<i>326,001</i>	<i>225,301</i>	<i>124,676</i>	<i>47,561</i>	<i>48,427</i>	<i>17,530</i>	<i>789,496</i>	<i>82.1</i>
<b>B. ADVANCES TO PUBLIC AUTHORITIES.</b>								
<i>Public Authorities (including Local Government and Semi-Governmental Bodies) ..</i>	<i>5,337</i>	<i>5,086</i>	<i>1,413</i>	<i>186</i>	<i>143</i>	<i>196</i>	<i>12,361</i>	<i>1.3</i>
<b>C. PERSONAL ADVANCES CLASSIFIED ACCORDING TO MAIN PURPOSE OF ADVANCE.</b>								
1. Building or purchasing own home (Individuals) ..	41,471	22,156	11,920	3,960	8,060	1,588	89,155	9.2
2. All other (including Personal Loans) ..	22,548	17,561	6,783	2,997	4,343	1,390	55,622	5.8
<i>Total ..</i>	<i>64,019</i>	<i>39,717</i>	<i>18,703</i>	<i>6,957</i>	<i>12,403</i>	<i>2,978</i>	<i>144,777</i>	<i>15.0</i>
<b>D. ADVANCES TO NON-PROFIT ORGANIZATIONS:</b>								
<i>Total ..</i>	<i>6,247</i>	<i>4,009</i>	<i>2,681</i>	<i>569</i>	<i>1,547</i>	<i>354</i>	<i>15,407</i>	<i>1.6</i>
<b>TOTAL ADVANCES TO RESIDENT BORROWERS.</b>								
<i>Total ..</i>	<i>401,604</i>	<i>274,113</i>	<i>147,473</i>	<i>55,273</i>	<i>62,520</i>	<i>21,058</i>	<i>962,041</i>	<i>100.0</i>
<i>Non-Resident Borrowers.</i>								
<b>ADVANCES TO NON-RESIDENT BORROWERS</b>								
<i>Total ..</i>	<i>92</i>	<i>80</i>	<i>15</i>	<i>..</i>	<i>7</i>	<i>1</i>	<i>195</i>	<i>..</i>
<b>TOTAL ADVANCES TO RESIDENT AND NON-RESIDENT BORROWERS.</b>								
<b>Grand Total ..</b>	<b>401,696</b>	<b>274,193</b>	<b>147,488</b>	<b>55,273</b>	<b>62,527</b>	<b>21,059</b>	<b>962,236</b>	<b>100.0</b>

(a) Includes Papua and New Guinea. (b) Includes Australian Capital Territory. (c) Includes Northern Territory. (d) Includes temporary advances to woolbuyers.

(ii) *Australia, June, 1955 to June, 1958.* The following table provides a classification of advances within Australia (including Papua and New Guinea) as at the end of June, 1955 to 1958.

**COMMONWEALTH TRADING BANK OF AUSTRALIA AND PRIVATE TRADING BANKS: CLASSIFICATION OF ADVANCES WITHIN AUSTRALIA(a) AMOUNT AND PROPORTION OF EACH CLASS TO TOTAL.**

Classification.	At End of June—							
	1955.		1956.		1957.		1958.	
	Amount (£'000.)	Per cent.						

*Resident Borrowers.*

**A. BUSINESS ADVANCES CLASSIFIED ACCORDING TO MAIN INDUSTRY OF BORROWER.**

1. Agriculture, Dairying and Grazing ..	220,879	23.8	213,013	23.7	200,027	22.7	230,976	24.0
2. Manufacturing ..	190,728	20.6	185,117	20.6	182,896	20.7	184,580	19.2
3. Transport, Storage and Communication ..	17,244	1.9	17,267	1.9	12,399	1.4	14,646	1.5
4. Finance—								
(i) Building and Housing Societies	25,993	2.8	26,208	2.9	25,360	2.9	26,502	2.8
(ii) Other ..	46,272	5.0	46,217	5.2	27,172	3.1	40,582	4.2
Total Class 4 ..	72,265	7.8	72,425	8.1	52,532	6.0	67,084	7.0
5. Commerce—								
(i) Retail Trade ..	86,962	9.4	86,310	9.6	87,522	9.9	99,600	10.3
(ii) Wholesale Trade	73,827	7.9	72,062	8.1	99,939	11.3	102,670	10.7
Total Class 5 ..	160,789	17.3	158,372	17.7	187,461	21.2	202,270	21.0
6. Building and Construction ..	22,270	2.4	20,147	2.2	20,665	2.3	25,109	2.6
7. Other Businesses ..	70,813	7.6	70,307	7.9	55,261	6.3	60,229	6.3
8. Unclassified ..	(c)	(c)	(c)	(c)	4,413	0.5	4,602	0.5
Total Business Advances ..	754,988	81.4	736,648	82.1	715,654	81.1	789,496	82.1

**B. ADVANCES TO PUBLIC AUTHORITIES.**

Public Authorities (incl. Local Government and Semi-Governmental Bodies) ..	11,378	1.2	18,096	2.0	16,578	1.9	12,361	1.3
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**C. PERSONAL ADVANCES CLASSIFIED ACCORDING TO MAIN PURPOSE OF ADVANCE.**

1. Building or purchasing own home (Individuals) ..	105,676	11.4	94,571	10.6	86,822	9.9	89,155	9.2
2. All other (including Personal Loans) ..	55,399	6.0	47,910	5.3	49,704	5.6	55,622	5.8
Total ..	161,075	17.4	142,481	15.9	136,526	15.5	144,777	15.0

**D. ADVANCES TO NON-PROFIT ORGANIZATIONS.**

Total ..	(d)	(d)	(d)	(d)	13,424	1.5	15,407	1.6
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**TOTAL ADVANCES TO RESIDENT BORROWERS.**

Total ..	(d)	(d)	(d)	(d)	882,182	100.0	962,041	100.0
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*Non-Resident Borrowers.*

**ADVANCES TO NON-RESIDENT BORROWERS.**

Total ..	(d)	(d)	(d)	(d)	176	..	195	..
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**TOTAL ADVANCES TO RESIDENT AND NON-RESIDENT BORROWERS.**

Grand Total ..	927,441	100.0	897,225	100.0	882,358	100.0	962,236	100.0
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(a) Includes Papua and New Guinea. (b) Includes temporary advances to woolbuyers.  
(c) Included with Other Businesses. (d) Not available separately.

NOTE:—The figures for 1955 and 1956 for some classes are not strictly comparable with those for later periods. See para. 11 (i), page 747.

12. Interest on Deposits : Rates—Cheque-paying Banks.—Particulars of interest rates for fixed deposits since 1952 are shown hereunder.

**BANK FIXED DEPOSIT RATES : AUSTRALIA.**

(Per cent. per annum.)

Date from which Operative.	Deposits for—			
	Three Months.	Six Months.	Twelve Months.	Twenty-four Months.
29th July, 1952 .. .. .	1	1½	1½	(a) 1½
1st January, 1955 .. .. .	1½	1½	1½	2
15th March, 1956 .. .. .	2½	2½	2½	3
4th December, 1956 .. .. .	2½	2½	2½	3½

(a) On first £10,000; rate on amounts in excess of £10,000 was 1½ per cent.

13. Clearing House Returns—Average Weekly Clearings.—The average weekly clearings in each capital city for the years ended June, 1939 and 1954 to 1958, are shown in the following table.

**BANK CLEARINGS(a) : AVERAGE WEEKLY CLEARINGS.**

(£'000.)

Year ended June—	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Total.
1939 .. .. .	17,832	15,415	4,212	2,953	2,055	623	43,090
1954 .. .. .	97,191	87,505	20,736	18,027	13,249	3,393	240,101
1955 .. .. .	103,849	95,245	22,072	19,681	13,684	3,670	258,201
1956 .. .. .	109,975	101,153	22,488	21,021	14,089	3,962	272,688
1957 .. .. .	119,381	107,563	25,571	23,042	14,927	4,237	294,721
1958 .. .. .	124,172	114,854	25,835	24,099	15,598	4,427	308,985

(a) Excludes transactions connected with the issue and redemption of Treasury Bills.

14. Debits to Customers' Accounts—Cheque-paying Banks.—Statistics of debits to customers' accounts have been collected since September, 1945. Generally they represent the total of all cheques drawn by the customers of the banks. In the following table, the average weekly debits to customers' accounts of all cheque-paying banks (including the special departments of the Commonwealth Bank—Rural Credits, Mortgage Bank and Industrial Finance Departments) are shown for each State for the years ended June, 1954 to 1958. In this table, debits to accounts of Australian Governments in capital cities are excluded, as they are subject to abnormal influences and are not uniform for each State.

**CHEQUE-PAYING BANKS: AVERAGE WEEKLY DEBITS TO CUSTOMERS' ACCOUNTS.**

(Excluding Debits to Australian Government Accounts in Capital Cities.)

(£'000.)

Year ended June—	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	A.C.T.	Total.
1954 .. .. .	171,709	154,885	51,032	32,802	25,339	9,938	775	446,480
1955 .. .. .	187,471	176,146	53,873	36,288	26,247	10,716	821	491,562
1956 .. .. .	200,852	185,369	56,028	39,564	26,918	11,615	1,025	521,371
1957 .. .. .	219,368	195,455	62,743	42,685	28,571	12,609	1,229	562,660
1958 .. .. .	230,335	207,059	65,655	44,276	30,215	12,930	1,533	592,003

15. Rates of Exchange.—(i) *Oversea Exchange Rates.* In the following table, the par of exchange (based on par values agreed with the International Monetary Fund) and average telegraphic transfer selling rates of exchange for Sydney on a number of oversea countries are shown. Generally, the averages, which are averages of daily quotations, are based on rates quoted by the Commonwealth Bank, but where these were not available rates issued by the Department of Customs and Excise have been used.

OVERSEA EXCHANGE RATES : PAR OF EXCHANGE AND AVERAGE TELE-GRAPHIC TRANSFER SELLING RATES FOR SYDNEY ON OVERSEA COUNTRIES.

Country.	Basis of Quotation.	Par of Ex-change.(a)	Selling Rate 1957-58.	Country.	Basis of Quotation.	Par of Ex-change.(a)	Selling Rate 1957-58.
Belgium ..	Francs to £A.1 ..	112.000	110.610	Netherlands ..	Guilders to £A.1	8.512	8.416
Canada ..	Dollars to £A.1 ..	(b)	2.157	New Zealand ..	£A to £NZ.100 ..	(c)	124.538
Ceylon ..	Pence A. to Rupee	22.500	22.808	Norway ..	Kroner to £A.1 ..	16.000	15.830
Denmark ..	Kroner to £A.1 ..	15.472	15.320	Pakistan ..	Pence A. to Rupee	22.500	22.719
Egypt ..	Piastres to £A.1 ..	78.006	77.490	Portugal ..	Escudos to £A.1 ..	(c)	63.797
Fiji ..	£A. to £F.100 ..	112.610	113.000	Singapore ..	Pence A. to Dollar	35.000	35.266
Finland ..	Markka to £A.1.	716.800	664.900	South Africa.			
France ..	Francs to £A.1 ..	(b)	916.390	Union of ..	£A. to £SA.100 ..	125.000	125.788
French Oceania	Francs to £A.1 ..	(b)	162.94	Sweden ..	Kronor to £A.1 ..	11.588	11.475
Germany, Fed.	Deutschmarks to			Switzerland ..	Francs to £A.1 ..	(c)	9.714
Rep. of ..	£A.1	9.408	9.297	United Kingdom	£A. to £Eng.100 ..	125.000	125.500
Hong Kong ..	Pence A. to Dollar	18.750	18.813	United States of			
India ..	Pence A. to Rupee	22.500	22.719	America ..	Dollars to £A.1 ..	2.240	2.232
Indonesia ..	Rupiahs to £A.1 ..	(c)	25.053	U.S.S.R. ..	Roubles to £A.1 ..	(c)	8.924
Japan ..	Yen to £A.1 ..	806.400	796.005				

(a) As at 30th June, 1958, established under International Monetary Fund Agreement. (b) No par value established. (c) Not a member of International Monetary Fund.

(ii) *Interstate Exchange Rates.* Exchange rates between the capital cities and towns of each of the States and other States or parts thereof at 30th June, 1958, are shown below. Rates varied from 2s. per £100 between the nearer locations to 10s. per £100 between those more widely separated.

INTERSTATE BANK EXCHANGE RATES, 30th JUNE, 1958.(a)

(s. d. per £100.)

Between—	And—						
	New South Wales.	Victoria.	Brisbane and adjacent towns.	South Australia.	Perth and all but distant towns.	Tasmania.	Aust. Cap. Terr.
Sydney and New South Wales towns	..	2 6	2 6	5 0	7 6	5 0	2 0
Melbourne and Victorian towns ..	2 6	..	5 0	2 6	5 0	2 6	2 0
Brisbane and adjacent towns ..	2 6	5 0	..	7 6	10 0	7 6	2 6
Adelaide and South Australian towns	5 0	2 6	7 6	..	2 6	5 0	5 0
Perth and all but distant towns ..	7 6	5 0	10 0	2 6	..	7 6	7 6
Hobart and Tasmanian towns ..	5 0	2 6	7 6	5 0	7 6	..	5 0
Australian Capital Territory ..	2 0	2 0	2 6	5 0	7 6	5 0	..

(a) Unchanged since 1st January, 1940.

There is no charge for transfers within a city or a town. In all States excepting Queensland and Western Australia, the exchange for transfers between towns in the same State is 2s. per £100. Queensland and Western Australia are divided into zones. The exchange rate for transfers between towns in the same zone is 2s. per £100, with higher rates for inter-zone transfers.

The exchange rate between Papua and New Guinea and the mainland is 10s. per £100 for all points.

## § 2: Savings Banks.

1. **General.**—The inauguration of savings banks in Australia dates from 1819, when a private savings bank was opened in Sydney. In 1832, the legislature created "The Savings Bank of New South Wales" under the control of trustees, and shortly after its establishment the funds of the private savings bank were transferred to the new institution. In the other States, provision for placing deposits with savings banks dates from 1841 in Victoria; 1854 in Queensland; 1841 in South Australia; 1863 in Western Australia. (a savings bank was opened in 1856 but was closed a year later); 1835 in Launceston; and 1845 in Hobart. These early banks functioned as trustee savings banks, but, with the exception of the Hobart and Launceston institutions, were later absorbed by, or amalgamated with, State government savings banks. The Commonwealth Savings Bank, established as a branch of the Commonwealth Bank in 1912 and separately constituted in 1928, absorbed the Tasmanian State Savings Bank in 1913, the Queensland State Savings Bank in 1920 and the New South Wales and Western Australian State Savings Banks in 1931.

Post Office savings banks were established in all States from 1864 onwards. These were separate government institutions except in South Australia, where the Post Office acted as agent for the savings bank. Since the federation of the Australian States in 1901, post offices have been controlled by the Commonwealth Government, but they continued to act as savings bank agencies for the State institutions until the establishment of the Commonwealth Bank in 1912. They now act as agents for the Commonwealth Savings Bank.

During 1956, four new savings banks, the Bank of New South Wales Savings Bank Ltd., the Australia and New Zealand Savings Bank Ltd., the C.B.C. Savings Bank Ltd., and The Rural and Industries Bank of Western Australia, were established. Three of these are associated with and operate from the same premises as existing private trading banks and the other is a division of a State bank—The Rural and Industries Bank of Western Australia. Savings banks operating at the end of 1958 were—the Commonwealth Savings Bank (in all States and Territories), the Bank of New South Wales Savings Bank Ltd. and the Australia and New Zealand Savings Bank Ltd. (in all States and Territories except South Australia and Tasmania), the C.B.C. Savings Bank Ltd. (in all States except South Australia and Tasmania, and in the Australian Capital Territory), The State Savings Bank of Victoria, The Savings Bank of South Australia, The Rural and Industries Bank of Western Australia, and the two trustee banks, The Launceston Bank for Savings and The Hobart Savings Bank.

The prime object of the foundation of savings banks in Australia was the encouragement of thrift, deposits of one shilling and upwards being accepted. Although depositors may not operate on their savings bank accounts by means of cheques, they have practically all the other advantages of a current account and in addition receive interest on their minimum monthly balances. No charge is made by the banks for keeping the accounts.

Cheque accounts are available at most savings banks to non-profit organizations such as friendly, co-operative and charitable societies. As with savings bank accounts, interest is allowed and no charge is made for keeping these accounts. Since March, 1958, similar facilities have been available at the State Savings Bank of Victoria to other depositors. However, the cheque accounts of these depositors do not bear interest. The statistics relating to deposits, etc., which follow include these cheque accounts. Separate details are also given in para. 6, page 735.

2. **Branches and Agencies.**—The number of branches and agencies in Australia of the various savings banks at 30th June, 1958, are given in the following table.

## ALL SAVINGS BANKS : NUMBER OF BRANCHES AND AGENCIES AT 30th JUNE, 1958.

Bank.	Branches.	Agencies.
Commonwealth Savings Bank .. .. .	601	6,243
Australia and New Zealand Savings Bank Ltd. .. .. .	445	379
Bank of New South Wales Savings Bank Ltd. .. .. .	652	222
C.B.C. Savings Bank Ltd. .. .. .	349	80
The State Savings Bank of Victoria .. .. .	313	584
The Savings Bank of South Australia .. .. .	92	554
The Rural and Industries Bank of Western Australia .. .. .	40	24
The Launceston Bank for Savings .. .. .	19	36
The Hobart Savings Bank .. .. .	20	14
<b>Total .. .. .</b>	<b>2,531</b>	<b>8,136</b>

3. Number of Operative Accounts. The following table shows the number of operative savings bank accounts in existence at the end of June, 1957 and 1958. It should be noted that these figures relate to the number of accounts and not necessarily to the number of depositors.

## ALL SAVINGS BANKS : NUMBER OF OPERATIVE ACCOUNTS.(a)

State or Territory.	At end of June.	
	1957.	1958.
New South Wales .. .. .	2,608,653	2,740,364
Victoria .. .. .	2,320,253	2,437,639
Queensland .. .. .	959,972	1,014,008
South Australia .. .. .	839,075	863,022
Western Australia .. .. .	473,548	497,690
Tasmania .. .. .	291,368	295,050
Northern Territory .. .. .	11,643	12,767
Australian Capital Territory .. .. .	23,233	25,917
<b>Total .. .. .</b>	<b>7,527,745</b>	<b>7,886,457</b>

(a) Excludes school bank accounts and inoperative accounts (i.e. accounts of less than £1 which have not been operated on for more than two years).

4. Business Transacted. The following table shows details of the business transacted in Australia by savings banks during the years ended 30th June, 1957 and 1958 :—

ALL SAVINGS BANKS : BUSINESS TRANSACTED IN AUSTRALIA.  
(£'000.)

State or Territory.	Year ended June, 1957.				Year ended June, 1958.			
	Deposits During Year.	Withdrawals During Year.	Interest Added to Accounts During Year.	Amount on Deposit at end of June, 1957.	Deposits During Year.	Withdrawals During Year.	Interest Added to Accounts During Year.	Amount on Deposit at end of June, 1958.
New South Wales .. .. .	421,338	395,584	9,876	422,184	452,165	435,978	10,647	449,018
Victoria .. .. .	382,750	367,130	9,773	411,569	430,551	418,804	10,315	433,631
Queensland .. .. .	150,796	142,281	3,393	144,608	161,596	156,620	3,660	153,244
South Australia .. .. .	129,708	126,591	3,528	142,401	141,074	138,462	3,845	148,858
Western Australia .. .. .	65,576	62,279	1,462	62,693	71,190	69,500	1,565	65,948
Tasmania .. .. .	31,942	31,383	989	38,759	33,148	32,714	1,048	40,241
Northern Territory .. .. .	2,655	2,458	41	1,894	3,070	2,910	44	2,098
Australian Capital Territory .. .. .	4,595	4,378	75	3,302	5,758	5,341	86	3,805
<b>Total .. .. .</b>	<b>1,189,360</b>	<b>1,132,084</b>	<b>29,137</b>	<b>1,227,410</b>	<b>1,298,552</b>	<b>1,260,329</b>	<b>31,210</b>	<b>1,296,843</b>

5. Depositors' Balances.—The amount at credit of depositors' accounts and the average per head of population for each State and Territory at the end of June, 1939 and 1954 to 1958, are shown in the following table:—

**ALL SAVINGS BANKS: DEPOSITORS' BALANCES IN AUSTRALIA.**

At end of June.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	A.C.T.	Australia.
<b>COMMONWEALTH SAVINGS BANK.</b> (£'000.)									
1939..	87,474	11,242	29,045	3,167	12,396	2,358	99	319	146,100
1954..	339,796	94,174	117,406	28,192	52,614	12,869	1,308	2,328	648,687
1955..	358,645	104,597	124,814	30,547	53,629	13,763	1,482	2,575	690,052
1956..	363,711	110,215	126,998	31,880	54,295	14,312	4,384		705,795
1957..	363,406	114,542	129,816	33,590	53,697	15,252	4,470		714,773
1958..	367,439	117,805	132,545	35,222	53,613	16,119	4,820		727,563

**STATE SAVINGS BANKS.**  
(£'000.)

1939..	..	69,219	..	24,230	..	..	..	..	93,449
1954..	..	245,607	..	94,757	..	..	..	..	340,364
1955..	..	260,151	..	101,145	..	..	..	..	361,296
1956..	..	264,317	..	103,876	635	..	..	..	368,828
1957..	..	266,276	..	108,811	2,302	..	..	..	377,389
1958..	..	272,807	..	113,636	3,507	..	..	..	389,950

**TRUSTEE SAVINGS BANKS: HOBART AND LAUNCESTON.**  
(£'000.)

1939..	..	..	..	..	..	6,038	..	..	6,038
1954..	..	..	..	..	..	21,078	..	..	21,078
1955..	..	..	..	..	..	22,046	..	..	22,046
1956..	..	..	..	..	..	22,899	..	..	22,899
1957..	..	..	..	..	..	23,507	..	..	23,507
1958..	..	..	..	..	..	24,122	..	..	24,122

**PRIVATE SAVINGS BANKS.**  
(£'000.)

1956..	22,843	11,644	5,702	..	3,004	..	282	43,475
1957..	58,778	30,751	14,792	..	6,694	..	726	111,741
1958..	81,579	43,019	20,699	..	8,828	..	1,083	155,208

**ALL SAVINGS BANKS.**  
(£'000.)

1939..	87,474	80,461	29,045	27,397	12,396	8,396	99	319	245,587
1954..	339,796	339,781	117,406	122,949	52,614	33,947	1,308	2,328	1,010,129
1955..	358,645	364,748	124,814	131,692	53,629	35,809	1,482	2,575	1,073,394
1956..	386,554	386,176	132,700	135,756	57,934	37,211	1,656	3,010	1,140,997
1957..	422,184	411,569	144,608	142,401	62,693	38,759	1,894	3,302	1,227,410
1958..	449,018	433,631	153,244	148,858	65,948	40,241	2,098	3,805	1,296,843

**PER HEAD OF POPULATION.**  
(£. s. d.)

1939..	31 16 7	42 16 8	28 10 7	45 18 6	26 7 5	35 1 5	15 14 8	25 7 4	35 4 11
1954..	99 5 1	138 11 1	89 1 3	154 4 11	82 4 9	109 19 0	79 8 8	76 15 8	112 8 1
1955..	102 15 1	144 11 4	92 16 7	160 13 9	81 8 9	113 15 11	84 6 5	79 8 4	116 13 3
1956..	108 15 8	148 4 9	96 16 3	159 19 10	85 10 6	116 8 3	90 10 0	87 5 11	121 0 7
1957..	116 10 8	153 18 11	103 10 8	163 1 10	90 12 3	118 4 1	98 15 8	87 4 4	127 5 8
1958..	121 12 1	158 8 4	108 0 2	166 0 6	93 11 2	119 16 9	106 9 9	92 7 5	131 14 1

6. **Cheque Accounts.**—At most savings banks, cheque accounts are available to non-profit organizations such as friendly, co-operative and charitable societies. Similar facilities are also available to other depositors at the State Savings Bank of Victoria. Details of the transactions on these accounts during the year ended June, 1958, (excluding the Savings Bank of South Australia) together with the number of operative accounts and the amount on deposit at the end of June, 1958, were as follows:—Deposits during the year, £185,108,742; withdrawals during the year, £178,994,302; interest added during the year, £496,896; number of operative accounts at end of year, 83,563; amount on deposit at end of year, £30,517,471. These figures are included in the statistics in previous paragraphs.

7. **School Banking.**—With the object of encouraging principles of thrift among children, agencies of the savings banks have been established at most of the schools throughout Australia. Particulars of operative accounts for the Commonwealth at the end of June of the years 1939 and 1954 to 1958, appear below:—

**SCHOOL SAVINGS BANKS : AUSTRALIA.**

At end of June—			Number of School Agencies.	Number of Operative Accounts.	Deposits.	Deposits per Operative Account.
					£	£ s. d.
1939	..	..	9,535	560,116	1,090,703	1 18 11
1954	..	..	8,179	724,038	4,831,538	6 13 6
1955	..	..	8,210	761,974	5,280,808	6 18 7
1956	..	..	8,591	825,692	5,785,495	7 0 2
1957	..	..	8,294	895,139	6,429,490	7 3 8
1958	..	..	8,650	1,039,970	7,348,513	7 1 4

8. **Assets.**—The assets within Australia of all Savings Banks as at the end of June 1957 and 1958, are given in the following table:—

**ALL SAVINGS BANKS : ASSETS WITHIN AUSTRALIA.(a)**  
(£'000.)

Item.	At End of June.	
	1957.	1958.
Coin, Bullion and Australian Notes .. .. .	2,801	2,812
Deposits with Commonwealth Bank .. .. .	98,576	104,633
Deposits with Other Banks .. .. .	54,797	54,644
Notes, Bills, Cheques, &c., of Other Banks .. .. .	73	83
Australian Public Securities (including Treasury Bills)—		
Commonwealth and States .. .. .	706,062	719,354
Local and Semi-governmental Authorities .. .. .	199,186	224,502
Other Securities .. .. .	57	..
Loans, Advances and Bills Discounted .. .. .	202,076	228,144
Bank Premises, Furniture and Sites .. .. .	10,602	12,911
Bills Receivable and all Other Assets .. .. .	10,363	11,101
<b>Total Assets</b> .. .. .	<b>1,284,593</b>	<b>1,358,184</b>

(a) Includes assets in Papua, New Guinea and Norfolk Island.

9. **War Savings and Savings Certificates.**—Sales of savings certificates and stamps under the War Savings and Savings Certificate schemes, particulars of which were given in earlier issues of the Official Year Book (see No. 37, page 586), were discontinued after 31st January, 1949, except for some sales made to wind up savings groups, etc. This method of saving was replaced by special savings schemes to operate through the savings banks. Employers were asked to co-operate by forming employee savings groups and by making regular deductions from wages and salaries for payment into group savings bank accounts, and thence, at the end of each quarter to individual accounts. The total value of certificates outstanding at 30th June in each of the last five years was:—1954, £30,310,000; 1955, £26,615,000; 1956, £23,366,000; 1957, £20,043,000; 1958, £16,004,000.

10. **Commonwealth Savings Bank of Australia.**—(i) *General.* The Savings Bank Department of the Commonwealth Bank opened for business in Victoria on 15th July, 1912; in Queensland on 16th September, 1912; in the Northern Territory on 21st October, 1912; in Tasmania on 1st January, 1913, and in New South Wales, South Australia and Western Australia on 13th January, 1913. The Tasmanian State Savings Bank was absorbed by the Commonwealth Bank on 1st January, 1913, the Queensland State Savings Bank was taken over in 1920 and the New South Wales and Western Australian State Savings Banks in 1931. The Savings Bank Department was separated from the General Bank on 9th June, 1928, and established as a separate institution known as the "Commonwealth Savings Bank of Australia". It has since then operated independently, publishing its own balance-sheets and profit and loss accounts. The Commonwealth Bank Act 1927, which provided for the establishment of the Commonwealth Savings Bank as a separate institution, provided for a Commission of three members to manage the savings bank. This Commission was never appointed and the Commonwealth Bank Act 1945 placed the control of the Commonwealth Savings Bank under the Governor of the Commonwealth Bank.

(ii) *Balance-sheet, 30th June, 1957 and 1958.* Particulars of the liabilities and assets of the Commonwealth Savings Bank as at 30th June, 1957 and 1958, were as follows:—

**COMMONWEALTH SAVINGS BANK(a) : LIABILITIES AND ASSETS, 30th JUNE.**  
(£'000.)

Liabilities.	1957.	1958.	Assets.	1957.	1958.
Reserve Fund . . . . .	9,481	9,918	Cash Balances and Money at Short Call	66,902	69,625
Depositors' Balances and Accrued Interest	721,494	734,321	Australian Notes and Coin . . . . .	942	1,075
Contingency Account and other Liabilities . .	17,968	18,977	Government Securities	467,088	467,718
			Securities of Municipal and other Public Authorities . . . . .	82,213	83,171
			Bank Premises . . . . .	7,334	8,612
			Loans and Advances . .	110,745	119,299
			Other Assets . . . . .	13,719	13,716
<b>Total . . . . .</b>	<b>748,943</b>	<b>763,216</b>	<b>Total . . . . .</b>	<b>748,943</b>	<b>763,216</b>

(a) Includes branches in London, in the Territories of Papua and New Guinea, Norfolk Island, and British Solomon Islands.

(iii) *Profits.* Under the terms of the Savings Bank Amalgamation Agreements, the profits of the Commonwealth Savings Bank in New South Wales, Queensland, Western Australia and Tasmania are equally divided between the Bank and the former controlling authorities in those States. Net profits for the years ended 30th June, 1939 and 1954 to 1958, and the distribution of those profits are shown in the following table.

**COMMONWEALTH SAVINGS BANK : DISTRIBUTION OF PROFITS.**  
(£.)

Year ended 30th June—	Total Profit.	Payments to State Authorities under Savings Bank Amalgamation Agreements.					Pub-lished Profit.	Distribution of Published Profit.	
		New South Wales. (a)	Queens-land. (b)	Western Aus-tralia. (b)	Tas-mania. (b)	Total.		National Debt Sinking Fund.	Savings Bank Reserve Fund.
1939 ..	532,736	168,878	30,464	13,251	3,861	216,454	316,282	158,141	158,141
1954 ..	2,031,371	629,614	155,365	33,217	12,439	830,635	1,200,736	600,368	600,368
1955 ..	1,855,901	587,959	130,415	26,284	6,327	750,985	1,104,916	552,458	552,458
1956 ..	1,251,153	453,105	60,347	12,211	304	525,967	725,186	362,593	362,593
1957 ..	890,419	394,386	..	..	..	394,386	c 580,386	290,193	290,193
1958 ..	1,415,722	516,714	..	..	..	516,714	c 874,926	437,463	437,463

(a) Paid to the Rural Bank of New South Wales. (b) Paid to State Consolidated Revenue Funds. (c) After adding amounts due by State Authorities under Savings Bank Amalgamation Agreements or deducting amounts due to State Authorities which have been offset.

11. **State Savings Banks.**—(i) *General.* State savings banks at present operating (with date of establishment shown in parentheses) are: The State Savings Bank of Victoria (1841); The Savings Bank of South Australia (1848); The Rural and Industries Bank of Western Australia (1956).

(ii) *Assets.* The assets of the State savings banks as at the date of their respective balance sheets are shown in the following table.

STATE SAVINGS BANKS : ASSETS, 1957 AND 1958.  
(£'000.)

Particulars.	1958.			1957.	
	The State Savings Bank of Victoria including Crédit Foncier Dept. (a)	The Savings Bank of South Australia. (a)	Rural and Industries Bank of Western Australia (Savings Bank Division). (b)	Total.	Total.
Cash, cash and fixed deposits at other Banks .. .. .	41,167	17,048	(c) 607	58,822	59,927
Government Securities (including Treasury Bills) .. .. .	104,366	55,998	1,252	161,616	164,513
Local and Semi-Governmental Securities .. .. .	82,637	23,722	306	106,665	97,200
Mortgages .. .. .	58,431	22,797	610	81,838	75,939
Landed and House Property .. .. .	2,350	1,200	..	3,550	2,730
All other Assets .. .. .	2,500	946	17	3,463	3,073
<b>Total Assets .. .. .</b>	<b>291,451</b>	<b>121,711</b>	<b>2,792</b>	<b>415,954</b>	<b>d 403,382</b>

(a) At 30th June, 1958.

(b) At 30th September, 1957, Disposition of savings bank deposits only.

(c) Includes Treasury Bills. (d) Details were: State Savings Bank of Victoria (including Crédit Foncier Department), £284,329,000. The Savings Bank of South Australia, £116,261,000, Rural and Industries Bank of Western Australia, £2,792,000.

(iii) *Profit and Loss Accounts.* Details of the profit and loss accounts of the State savings banks excluding the Rural and Industries Bank of Western Australia, included in the above table are given below for the years 1957 and 1958.

STATE SAVINGS BANKS : PROFIT AND LOSS ACCOUNTS, 1957 and 1958.  
(£'000.)

Particulars.	1958.			1957.	
	State Savings Bank of Victoria including Crédit Foncier Department. (a)	Savings Bank of South Australia. (a)	Total.	Total.	Total.
<b>Receipts—</b>					
Total—Interest, Dividends, Rents, and all other .. .. .	10,671	4,536	15,207		14,100
<b>Expenditure—</b>					
Interest allotted to Depositors including provision for accrued interest .. .. .	6,603	3,039	9,642		9,255
Expenses of Management and all other Expenditure .. .. .	3,715	1,085	4,800		4,400
<b>Total .. .. .</b>	<b>10,318</b>	<b>4,124</b>	<b>14,442</b>		<b>13,655</b>
Profit for year .. .. .	353	412	765		445
Balance of profit and loss account brought forward .. .. .	167	162	329		357
<b>Total .. .. .</b>	<b>520</b>	<b>574</b>	<b>1,094</b>		<b>802</b>
<b>Distribution of Profits—</b>					
Amount written off Bank Premises .. .. .	164	(b)	(c) 164	(c)	5
Amount carried to Reserves and Depreciation Funds .. .. .	179	410	589		467
Balance of Profit and Loss Account carried forward .. .. .	177	164	341		330

(a) Year ended 30th June.

(b) Not available, included with expenses of management, &c.

(c) Incomplete, see footnote (b).

12. *Trustee Savings Banks, Hobart and Launceston.*—(i) *General.* Two Trustee Savings Banks, Hobart and Launceston, operate within Tasmania. These banks commenced business in 1845 and 1835 respectively.

(ii) *Assets.* The assets of the Trustee Savings Banks as at 31st August, 1957 and 1958, are set out in the following table:—

**TRUSTEE SAVINGS BANKS: ASSETS AT 31st AUGUST, 1957 AND 1958.**  
(£'000)

Particulars.	1958.			1957.
	The Hobart Savings Bank.	The Launceston Bank for Savings.	Total.	Total.
Cash, Cash and Fixed Deposits with other Banks	1,322	1,513	2,835	2,957
Government Securities (including Treasury Bills)	3,629	3,005	6,634	6,774
Local and Semi-Governmental Securities ..	5,776	3,625	9,401	8,824
Mortgages .. .. .	2,971	3,699	6,670	6,494
Landed and House Property .. .. .	417	163	580	468
All other Assets .. .. .	162	147	309	287
<b>Total .. .. .</b>	<b>14,277</b>	<b>12,152</b>	<b>26,429</b>	<b>(a)25,804</b>

(a) Separate details were: The Hobart Savings Bank, £13,800,000 and the Launceston Bank for Savings, £12,004,000.

(iii) *Profit and Loss Accounts.* Details of the profit and loss accounts of the Trustee Savings Banks for the year ended 31st August, 1957 and 1958, are given below:—

**TRUSTEE SAVINGS BANKS: PROFIT AND LOSS ACCOUNTS, YEARS ENDED 31st AUGUST, 1957 AND 1958.**  
(£'000.)

Particulars.	1958.			1957.
	The Hobart Savings Bank.	The Launceston Bank for Savings.	Total.	Total.
<i>Receipts—</i>				
Total—Interest, Dividends, Rents and all other .. .. .	542	498	1,040	972
<i>Expenditure—</i>				
Interest allotted to Depositors .. .. .	365	311	676	653
Expenses of Management .. .. .	123	111	234	231
All other Expenditure .. .. .	4	..	4	3
<i>Total .. .. .</i>	<i>492</i>	<i>422</i>	<i>914</i>	<i>887</i>
<i>Profit for Year .. .. .</i>	<i>50</i>	<i>76</i>	<i>126</i>	<i>85</i>
Balance of Profit and Loss Account brought forward .. .. .	54	53	107	107
<i>Total .. .. .</i>	<i>104</i>	<i>129</i>	<i>233</i>	<i>192</i>
<i>Distribution of Profits—</i>				
Amount written off Bank Premises ..	30	25	55	29
Amount carried to Reserves and Depreciation Fund .. .. .	20	51	71	56
Balance of Profit and Loss Account carried forward .. .. .	54	53	107	107

13. *Private Savings Banks.*—(i) *General.* The Bank of New South Wales Savings Bank Limited and the Australia and New Zealand Savings Bank Limited on 18th January, 1956, and the C.B.C. Savings Bank Limited on 2nd June, 1956, were granted authority under section 8 of the Banking Act 1945-1953 to carry on banking business subject to the following conditions:—

1. The Savings Bank shall not, in the course of that business, receive a deposit from a company or other body engaged in or formed for the purpose of trading or acquiring pecuniary profit.

2. The Savings Bank shall not, in the course of that business, permit a cheque to be drawn on an account maintained with the Savings Bank, not being an account maintained by a local authority, friendly society, co-operative society, or any other society, body or club.
3. The Savings Bank shall not, in the course of that business, place money on deposit in Australia (whether fixed or in current account) with a bank other than a bank specified in Part 1. of the First Schedule to the Banking Act 1945-1953, the Commonwealth Bank of Australia, or the Commonwealth Trading Bank of Australia.
4. The Savings Bank shall at all times maintain in investments of the following kinds an amount which, together with cash on hand in Australia and moneys on deposit in Australia with banks, is not less than the amount on deposit in Australia with the Savings Bank:—
  - (a) securities issued by the Government of the Commonwealth, including Commonwealth Treasury Bills;
  - (b) securities issued by the Government of a State;
  - (c) securities issued or guaranteed by an authority constituted by or under a Commonwealth or a State Act;
  - (d) loans to building societies the repayment of which is guaranteed by the Commonwealth or a State; and
  - (e) loans for housing or other purposes on the security of land in Australia.
5. The Savings Bank shall at all times maintain in investments of the following kinds an amount which, together with cash on hand in Australia and moneys on deposit with the Commonwealth Bank of Australia, is not less than seventy per cent. of the amount on deposit in Australia with the Savings Bank:—
  - (a) securities issued by the Government of the Commonwealth, including Commonwealth Treasury Bills;
  - (b) securities issued by the Government of a State; and
  - (c) securities issued or guaranteed by an authority constituted by or under a Commonwealth or a State Act.
6. The Savings Bank shall at all times maintain in investment in Commonwealth Treasury Bills an amount which, together with moneys on deposit with the Commonwealth Bank of Australia, is not less than ten per cent. of the amount on deposit in Australia with the Savings Bank.
7. For the purposes of these conditions, the amount on deposit in Australia with the Savings Bank includes interest credited to the accounts of depositors.

The Bank of New South Wales Savings Bank Limited and the Australia and New Zealand Savings Bank Limited commenced business on 19th January, 1956, and the C.B.C. Savings Bank Limited on 16th July, 1956.

(ii) *Assets.* The assets of the private savings banks as at the date of their respective balance-sheets are shown in the following table:—

**PRIVATE SAVINGS BANKS: ASSETS 1957 AND 1958.**  
(£'000.)

Particulars.	1958.				1957.
	The Australia and New Zealand Savings Bank Ltd. (a)	The Bank of New South Wales Savings Bank Ltd. (a)	C.B.C. Savings Bank Ltd. (b)	Total.	Total.
Cash at Bankers—					
Commonwealth Bank .. ..	4,585	9,500	2,333	16,418	10,298
Other Banks .. .. .	3,945	9,656	4,508	18,109	17,965
Government Securities—					
Treasury Bills .. .. .	240	500	200	940	3,599
Other .. .. .	21,646	45,568	13,661	80,875	68,385
Local and Semi Governmental Securities .. .. .	12,617	16,916	2,929	32,462	18,278
Loans and Advances (including accrued interest and other accounts) .. .. .	7,937	14,106	3,084	25,127	12,297
<b>Total .. .. .</b>	<b>50,970</b>	<b>96,246</b>	<b>26,715</b>	<b>173,931</b>	<b>c 130,822</b>

(a) At 30th September. (b) At 30th June. (c) Separate details were:—The Australia and New Zealand Savings Bank Ltd., £39,704,000; the Bank of New South Wales Savings Bank Ltd., £73,192,000; C.B.C. Savings Bank Ltd., £17,926,000.

(iii) *Profit and Loss.* Details of the profit and loss accounts of the private savings banks included in the above table are given below for the years 1956, 1957 and 1958.

PRIVATE SAVINGS BANKS : PROFIT AND LOSS.(a)

(£.)

Year.	The Australia and New Zealand Savings Bank Ltd.(b)	The Bank of New South Wales Savings Bank Ltd.(b)	C.B.C. Savings Bank Ltd.(c)	Total.
1956 .. ..	24,705	37,135	(d)	61,840
1957 .. ..	80,810	131,567	31,657	244,034
1958 .. ..	161,486	198,483	69,992	429,961

(a) Net profit after allowing for all expenses and providing for reserves and contingencies, etc. (b) Year ended 30th September. (c) Year ended 30th June, commenced business in July, 1956. (d) See footnote (c).

14. *Classification of Depositors' Balances.*—The classification of deposits published by savings banks does not permit a fully detailed analysis with respect to Australia as a whole, but information supplied to the Royal Commission on Monetary and Banking Systems, for all savings banks except the Hobart trustee savings bank, shows that at 30th June, 1936, the amount on deposit in accounts with balances of less than £100 represented 21 per cent. of the total deposits; balances of over £100 but under £250, 21 per cent.; over £250 but under £500, 23 per cent.; over £500 but under £1,000, 25 per cent.; while those of over £1,000 accounted for 10 per cent. School, penny bank and small inoperative accounts were excluded in determining these percentages.

A similar classification as at 30th June, 1936, 1939 and 1954 to 1958, but relating only to the combined State Savings Banks of Victoria and South Australia, is shown below.

STATE SAVINGS BANKS : CLASSIFICATION OF DEPOSITS.

(Per cent.)

At 30th June—	£100 and under.	£101-£300.	£301-£500.	Total under £501.	£501-£1,000.	Over £1,000.
1936 .. ..	19.54	26.13	17.84	63.51	27.42	9.07
1939 .. ..	20.27	27.15	17.90	65.32	26.14	8.54
1954 .. ..	42.17			42.17	32.03	25.80
1955 .. ..	40.45			40.45	30.34	29.21
1956 .. ..	39.93			39.93	29.90	30.17
1957 .. ..	38.43			38.43	28.83	32.74
1958 .. ..	37.64			37.64	28.03	34.33

15. *Rates of Interest on Deposits.*—The following table shows the rates of interest allowed by Savings Banks at the 30th June, 1954 to 1958.

## SAVINGS BANKS : INTEREST RATES ON DEPOSITS.

(Per cent. per annum.)

Particulars.	Interest Rates at 30th June.				
	1954.	1955.	1956.	1957.	1958.
Commonwealth Savings Bank, State Savings Bank of Victoria, Bank of New South Wales Savings Bank Ltd.(a), Australia and New Zealand Savings Bank Ltd.(a), C.B.C. Savings Bank Ltd.(b), Rural and Industries Bank of Western Australia(c)—					
Ordinary Accounts(d)—					
£1 to £500 .. .. .	2½	2½	2½	2½	2½
£501 to £1,000 .. .. .	1½	1½	2½	2½	2½
£1,001 to £1,500 .. .. .	1½	1½	1½	1½	1½
Friendly and other Society Accounts—					
£1 to £2,000 .. .. .	2½	2½	2½	2½	2½
£2,001 and over .. .. .	1½	1½	1½	1½	1½
Deposit Stock(d)(e)—					
£10 to £1,000 .. .. .	1½	2	2½	2½	2½
Savings Bank of South Australia—					
Ordinary Accounts(d)—					
£1 to £500 .. .. .	2½	2½	2½	2½	2½
£501 to £750 .. .. .	1½	2½	2½	2½	2½
£751 to £1,500 .. .. .	1½	1½	2½	2½	2½
Friendly and other Society Accounts—					
£1 to £500 .. .. .	2½	2½	2½	2½	2½
£501 to £2,000 .. .. .	2½	2½	2½	2½	2½
£2,001 and over .. .. .	1½	1½	1½	1½	1½
Deposit Stock(d)—					
£10 to £2,000 .. .. .	1½	2	2½	2½	2½
Trustee Banks—Hobart and Launceston—					
Ordinary Accounts(d)—					
£1 to £500(f) .. .. .	2½	2½	3	3	3
£501 to £1,500 .. .. .	Nil	Nil	Nil	1½	1½
Friendly and Other Society Accounts—					
£1 to £500(f) .. .. .	2½	2½	3	3	3
£501 and over .. .. .	Nil	Nil	Nil	1½	1½

(a) Commenced Savings Bank business on 19th January, 1956. (b) Commenced Savings Bank business on 16th July, 1956. (c) Commenced Savings Bank business on 5th April, 1956. (d) No interest is payable on amounts in excess of the maximum amount shown. (e) State Savings Bank of Victoria only. (f) Prior to the 1st March, 1957, the maximum amount on which interest was payable was £450.

## C. REGISTERED BUILDING AND CO-OPERATIVE SOCIETIES.

## § 1. Registered Building Societies.

1. Summary.—During 1956, returns were received from 1,141 societies, but the information was not exhaustive, as particulars regarding a number of organizations were not included. In the following table, general information is given relating to the societies for the year 1955–56.

## REGISTERED BUILDING SOCIETIES: SUMMARY, 1955-56.

Particulars.	N.S.W.	Vic.(a)	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Societies making returns—							
Permanent .. No.	37	16	4	5	6	5	73
Terminating .. No.	1,039	2	10	15	2	..	1,068
Total .. No.	1,076	18	14	20	8	5	1,141
Number of shareholders ..	120,465	12,509	27,876	24,397	25,149	9,244	219,640
„ shares ..	b 2,349,469	1,135,185	11,094,575	127,518	(c)	137,213	(c)
„ borrowers ..	(d) 13,177	16,476	12,021	3,947	4,442	3,102	53,165
	(£'000.)	(£'000.)	(£'000.)	(£'000.)	(£'000.)	(£'000.)	(£'000.)
Income for year from interest, etc.	1,384	815	335	85	204	161	2,984
Working expenses for year	927	651	110	74	45	26	1,833
Amount of deposits during year	530	1,249	1,525	623	870	1,089	5,886
Repayment of loans during year	2,145	2,395	1,201	350	578	659	7,328
Loans granted during year	(e) 4,366	2,389	2,245	574	807	709	11,090

(a) Year 1956; excludes Co-operative Housing Societies, for details of which see para. 3. (b) Terminating societies only. (c) Not available. (d) Permanent societies only. (e) Incomplete "Other terminating societies" not available.

2. **Liabilities and Assets.**—Particulars of liabilities and assets in 1955–56 of the 1,141 societies mentioned in the previous paragraph are shown below.

REGISTERED BUILDING SOCIETIES: LIABILITIES, 1955-56.

(£'000.)

State.	Paid-up Capital and Subscriptions.	Reserve Funds.	Deposits.	Bank Overdrafts and Other Liabilities.	Total Liabilities.
New South Wales ..	29,909	2,253	1,341	86,131	119,634
Victoria(a) ..	4,117	(b) 1,433	2,366	7,223	15,139
Queensland ..	6,369	113	232	829	7,543
South Australia ..	2,170	231	361	25	2,787
Western Australia ..	2,740	83	933	(c) 234	3,990
Tasmania ..	1,729	178	902	204	3,013
<b>Total ..</b>	<b>47,034</b>	<b>4,291</b>	<b>6,135</b>	<b>94,646</b>	<b>152,106</b>

(a) Year 1956. (b) Includes balances of Profit and Loss Accounts, £128,416. (c) Includes net accumulated profits, £162,385.

REGISTERED BUILDING SOCIETIES: ASSETS, 1955-56.

(£'000.)

State.	Advances on Mortgage.	Landed and House Property, Furniture, etc.	Cash in Hand and on Deposit	Other Assets.	Total Assets.
New South Wales ..	(a) 117,394	(b)	(b)	2,240	119,634
Victoria(c) ..	14,719	166	58	196	15,139
Queensland ..	(a) 7,213	127	45	158	7,543
South Australia ..	2,515	38	104	130	2,787
Western Australia ..	3,764	73	66	87	3,990
Tasmania ..	2,858	27	4	124	3,013
<b>Total ..</b>	<b>148,463</b>	<b>431</b>	<b>277</b>	<b>2,935</b>	<b>152,106</b>

(a) Includes Starr-Bowkett and other terminating societies:—New South Wales, £103,129,176 Queensland, £1,382,227. (b) Not available. Included in Other Assets. (c) Year 1956.

3. **Co-operative Housing Societies, Victoria.**—In addition to the information shown above, the following details of co-operative housing societies in Victoria have been extracted from the 10th Annual Report of the Registrar of Co-operative Housing Societies. At 30th June, 1956, 288 co-operative housing societies were registered in Victoria with 25,507 members who had subscribed for 905,989 shares, giving a nominal share capital subscribed of £47,352,693. For the twelve months ended 30th April, 1956, returns were submitted by 277 societies, the total income of those societies being £208,693 and total expenditure £197,978. The liabilities at 30th April, 1956, of the societies submitting returns were:—bank overdraft, £31,529,880; subscriptions, £4,849,372; surplus interest and management expenses, £497,431; other liabilities, £878,516, total liabilities, £37,755,199. Assets at the same date consisted of:—advances, £37,509,935; other assets, £245,264; total assets £37,755,199.

## § 2. Co-operative Societies.

Co-operative societies are divided into three classes—(i) those engaged in the manufacture and marketing of primary products and trade requirements; (ii) those engaged in retailing general household requirements; and (iii) those engaged in activities covered by both classes (i) and (ii). The first class may be described briefly as Producers' Co-operative Societies and the second as Consumers' Co-operative Societies. The particulars given for New South Wales relate to societies registered under the Co-operative Act 1923-1950. A summary of the business of all co-operative societies for the years 1955-56 or 1956 for all States except Western Australia is given in the following tables. Separate particulars for each of the three types of Co-operative Societies are given in the annual bulletin *Finance, Part 1.—Public and Private Finance* (see No. 48, pages 174 and 175).

## CO-OPERATIVE SOCIETIES.

Particulars.	N.S.W. 1955-56.	Vic. 1955-56.	O'land. 1955-56.	S. Aust. 1956.	Tas. 1955-56.
<b>SUMMARY.</b>					
Number of Societies ..	293	98	177	73	11
" Branches ..	(a) 204,404	77	94	(a)	18
" Members ..	204,404	61,329	126,573	114,018	9,794
	£'000.	£'000.	£'000.	£'000.	£'000.
Gross Turnover (Sales) ..	113,270	27,774	57,261	14,357	2,658
Other Income ..	536	1,577	1,980	1,021	118
Total Income ..	113,806	29,351	59,241	15,378	2,776
Total Purchases during Year ..	111,229	22,962	46,595	11,656	2,280
Other Expenditure ..	111,229	5,344	10,761	3,292	469
Total Expenditure ..	111,229	28,306	57,356	14,948	2,749
Rebates and Bonuses ..	1,641	242	465	611	3
Dividends on Share Capital ..	367	141	171	91	19

LIABILITIES AND ASSETS.  
(£'000.)

<i>Liabilities—</i>					
Paid-up Capital ..	9,050	3,151	5,514	1,920	454
Loan Capital ..		362	3,505	2,254	127
Bank Overdrafts ..	6,182	1,632	5,647	1,135	266
Accumulated Profits ..	6,460	800	1,319	450	57
Reserve Funds ..	6,460	3,261	5,004	1,293	121
Sundry Creditors ..	10,596	2,745	7,383	1,057	366
Other Liabilities ..		862	445	2,230	237
<i>Total Liabilities</i> ..	<i>32,288</i>	<i>12,813</i>	<i>28,817</i>	<i>10,339</i>	<i>1,628</i>
<i>Assets—</i>					
Land and Buildings ..	14,106	6,033	5,571	2,046	332
Machinery, Plant and other Fixed Assets ..	14,106	6,033	8,416	1,464	149
Stocks ..	9,742	2,146	3,872	3,431	453
Sundry Debtors ..	6,698	3,697	8,984	1,276	473
Cash in hand and on deposit ..		366	677	501	91
Profit and Loss Account ..		25	104	12	..
Other Assets ..	1,742	546	1,193	1,609	130
<i>Total Assets</i> ..	<i>32,288</i>	<i>12,813</i>	<i>28,817</i>	<i>10,339</i>	<i>1,628</i>

(a) Not available.

## D. INSURANCE.

## § 1. Introductory.

1. Legislation.—Section 51 of the Commonwealth Constitution confers the necessary powers on the Commonwealth Parliament to legislate with respect to "insurance other than State insurance; also State insurance extending beyond the limits of the State concerned". Commonwealth legislation includes the Marine Insurance Act 1909 defining the limits of marine insurance and regulating the terms of contracts, etc., the Insurance

Act 1932–1937 requiring the lodgment of deposits by insurance companies, and the Life Insurance Act 1945–1953 generally regulating life assurance business in Australia. The Marine Insurance Act 1909 and the Insurance Act 1932–1937 have limited application, and, except for life assurance business, which is regulated by the Life Insurance Act 1945–1953, insurance business is conducted almost entirely under State laws.

2. **Insurance Act 1932–1937.**—Companies, persons or associations of persons carrying on insurance business in Australia or in any Territory of Australia are required to lodge a deposit with the Commonwealth Treasurer.

Money deposited is invested by the Treasurer in prescribed securities selected by the depositor, and all interest is paid to depositors. Deposits remain as security against liability to policy holders, and are available to satisfy judgments obtained in respect of policies.

Deposits held by States on 1st February, 1932, could, however, remain with the States subject to the conditions embodied in the laws of the States, and depositors to the extent of the value of these deposits were exempt from liability to make deposits under the Commonwealth Act.

The following are not regarded as insurance businesses under the Act:—

Staff superannuation schemes; schemes of religious organizations solely for insurance of their property; and friendly society, union and association schemes involving superannuation or insurance benefits to employees.

This Act does not apply to State insurance within the limits of the State concerned, and, under the Life Insurance Act 1945–1953, ceased to apply to life assurance business.

3. **Life Insurance Act 1945–1953.**—The objects of this Act are:—(a) To replace all State legislation on the subject of life assurance and to provide uniform legislation for the whole of Australia; (b) to appoint an Insurance Commissioner to exercise active supervision of the activities of life assurance companies, with a view to securing the greatest possible protection for policy holders; (c) to set up adequate machinery for dealing with any company that fails to maintain a required minimum standard of solvency.

The Act was assented to on 16th August, 1945, and came into operation on 20th June, 1946. A summary of the provisions of the Act is given in Official Year Book No. 37, pages 595 to 597.

The main amendment by the Life Insurance Act, No. 94 of 1953 was to repeal Part VI of the principal Act, which provided for the establishment of a Commonwealth Government Insurance Office.

4. **Deposits under Insurance Acts.**—Deposits lodged under the Insurance Acts at 30th June, 1958, totalled £6,897,101, comprising £1,370,680 held by the Commonwealth in respect of Life Assurance and £5,304,131 held by the Commonwealth and £222,290 held by the States in respect of other forms of insurance. The deposits consisted of government, local, and semi-governmental securities £5,067,451, fixed deposits £1,000, bank guarantees and undertakings £1,390,000 and titles and mortgages £438,650.

## § 2. Life Assurance.

1. **General.**—Statistical returns have been collected from life assurance institutions since 1907. Until 1946, these returns were collected under the Census and Statistics Act. Since 1947, returns lodged under the Life Insurance Act 1945–1953 have been used to compile life assurance statistics. This change in method of collection has resulted in some slight changes in definition and, as a result, the statistics for 1947 and later years are not in all cases strictly comparable with those for earlier years. In earlier years, statistics of

revenue and expenditure and of assets and liabilities, although generally related only to the life assurance business of the offices making the returns, included, in some cases, a small amount of other classes of business. Under the Life Insurance Act 1945-1953, companies transacting life assurance business are required to set up separate statutory funds for their life assurance business. As a result of this, it has been possible to separate life assurance business from other classes of business. Except where otherwise indicated, the figures in the succeeding paragraphs refer to Australian business only. Business in the Territories of Papua and New Guinea is, however, included in the Australian figures.

2. **Offices Transacting Business.**—The number of offices which transacted life assurance business in Australia during 1957 was 26, including seven oversea companies. Of the nineteen Australian offices, six are purely mutual, including one which transacts general business in respect of which share capital is used, eleven are public companies, and two are State Government institutions. Of the total offices, fourteen transacted ordinary business only and the remainder both ordinary and industrial business. Where possible, ordinary and industrial business have been kept separate.

3. **Australian Business—Policies in Existence.**—In the following table, details of policies on the registers in each State and in the Australian Capital Territory are given for the year 1957—

## LIFE ASSURANCE : POLICIES EXISTING IN AUSTRALIA, 1957.

State or Territory.(a)	Assurance and Endowment Policies.				Annuity Policies.		
	Number of Policies.	Sum Assured. (£'000.)	Bonus Additions. (£'000.)	Annual Premiums. (£'000.)	Number of Policies.	Annuities per Annum. (£.)	Annual Premiums. (£.)
<b>ORDINARY DEPARTMENT.</b>							
New South Wales ..	1,234,117	836,772	69,056	28,484	3,157	1,689,610	471,259
Victoria ..	943,549	749,252	56,892	24,471	5,468	5,993,422	1,725,324
Queensland(b) ..	583,667	377,479	26,405	11,610	983	100,246	23,036
South Australia(c) ..	328,450	238,418	18,414	8,260	853	96,771	22,985
Western Australia ..	224,039	158,632	13,052	5,533	525	67,186	12,900
Tasmania ..	113,752	88,715	6,435	2,851	377	99,751	28,714
Australian Capital Territory ..	18,070	84,128	1,677	1,123	1,945	517,997	73,755
<b>Australia(b) ..</b>	<b>3,445,644</b>	<b>2,533,396</b>	<b>191,931</b>	<b>82,332</b>	<b>13,308</b>	<b>8,564,983</b>	<b>2,357,973</b>
<b>INDUSTRIAL DEPARTMENT.</b>							
New South Wales ..	1,328,922	121,488	3,896	5,784	..	..	..
Victoria ..	1,131,825	98,744	3,395	4,727	..	..	..
Queensland(b) ..	437,191	39,717	1,191	1,877	..	..	..
South Australia(c) ..	386,368	31,788	1,055	1,511	..	..	..
Western Australia ..	226,980	21,267	638	994	..	..	..
Tasmania ..	91,698	8,025	279	372	..	..	..
Australian Capital Territory ..	12,287	1,487	51	69	..	..	..
<b>Australia(b) ..</b>	<b>3,615,271</b>	<b>322,516</b>	<b>10,505</b>	<b>15,334</b>	<b>..</b>	<b>..</b>	<b>..</b>

(a) Location of register of policies. the Northern Territory.

(b) Includes Papua and New Guinea.

(c) Includes

The following table shows particulars of policies existing at the end of the years 1939 and 1953 to 1957 inclusive:—

**LIFE ASSURANCE : POLICIES EXISTING IN AUSTRALIA.**

At End of Year—	Assurance and Endowment Policies.				Annuity Policies.	
	Number of Policies.	Sum Assured. (£'000.)	Average per Policy. (£.)	Annual Premiums. (£'000.)	Number of Policies.	Annuities per Annum. (£.)
<b>ORDINARY DEPARTMENT.</b>						
1939 .. ..	1,243,378	427,291	344	(a) 13,954	3,826	384,584
1953 .. ..	2,892,842	1,552,706	537	53,186	16,971	5,975,783
1954 .. ..	3,033,250	1,741,160	574	59,593	16,965	6,267,828
1955 .. ..	3,183,644	1,970,750	619	66,551	17,135	7,198,873
1956 .. ..	3,319,429	2,223,270	670	73,663	17,294	8,172,202
1957 .. ..	3,445,644	2,533,396	735	82,332	13,308	8,564,983
<b>INDUSTRIAL DEPARTMENT.</b>						
1939 .. ..	2,491,742	111,862	45	(a) 6,490	2	58
1953 .. ..	3,880,768	285,594	74	14,232	..	..
1954 .. ..	3,826,745	296,994	78	14,583	..	..
1955 .. ..	3,765,851	307,370	82	14,901	..	..
1956 .. ..	3,701,540	315,440	85	15,132	..	..
1957 .. ..	3,615,271	322,516	89	15,334	..	..

(a) Annual premium income.

4. **New Policies issued in Australia.**—During 1957, 317,735 new policies for £445,470,000 were issued in the Ordinary Department. The average amount per policy was £1,402 as compared with an average of £1,176 per policy for all ordinary policies existing at the end of 1956.

In the Industrial Department, 209,733 new policies were issued during 1957, assuring £33,459,000. The average amount per policy was £160 as compared with an average of £156 per policy for all industrial policies existing at the end of 1956.

In the following table, details are given of new policies issued in each State and the Australian Capital Territory during 1957 for each class of business:—

**LIFE ASSURANCE : NEW POLICIES ISSUED IN AUSTRALIA, 1957.**

State or Territory.(a)	Assurance and Endowment Policies.				Annuity Policies.			
	Number of Policies.	Sum Assured. (£'000.)	Premiums.		Number of Policies.	Annuities per Annum. (£'000.)	Premiums.	
			Single. (£'000.)	Annual. (£'000.)			Single. (£'000.)	Annual. (£'000.)
<b>ORDINARY DEPARTMENT.</b>								
New South Wales ..	113,748	136,347	156	4,549	396	241	120	82
Victoria .. ..	83,711	145,542	222	4,101	643	869	672	179
Queensland(b) ..	52,778	61,449	219	1,785	38	9	35	1
South Australia(c) ..	30,607	41,624	27	1,389	24	6	16	2
Western Australia ..	21,979	25,732	14	879	24	7	8	1
Tasmania .. ..	11,511	15,580	6	486	37	11	5	3
Australian Capital Territory ..	3,401	19,196	5	332	350	107	13	20
Australia(b) ..	317,735	445,470	649	13,521	1,512	1,250	869	288
<b>INDUSTRIAL DEPARTMENT.</b>								
New South Wales ..	84,601	13,488	..	648	..	..	..	..
Victoria .. ..	58,682	9,357	..	438	..	..	..	..
Queensland(b) ..	26,917	4,193	..	198	..	..	..	..
South Australia(c) ..	21,793	3,376	..	157	..	..	..	..
Western Australia ..	12,028	1,960	..	89	..	..	..	..
Tasmania .. ..	4,556	853	..	39	..	..	..	..
Australian Capital Territory ..	1,156	232	..	11	..	..	..	..
Australia(b) ..	209,733	33,459	..	1,580	..	..	..	..

(a) Location of register of policies.

(b) Includes Papua and New Guinea.

(c) Includes the Northern Territory.

New policies issued in Australia during each of the years 1939 and 1953 to 1957 were as shown in the following table:—

## LIFE ASSURANCE: NEW POLICIES ISSUED IN AUSTRALIA.

Year.	Assurance and Endowment Policies.				Annuity Policies.			
	Number of Policies.	Sum Assured. (£'000.)	Premiums.		Number of Policies.	Annuities per Annum. (£'000.)	Premiums.	
			Single. (£'000.)	Annual. (£'000.)			Single. (£'000.)	Annual. (£'000.)
<b>ORDINARY DEPARTMENT.</b>								
1939 ..	142,157	48,263	(a)	(a)	420	87	(a)	(a)
1953 ..	300,295	252,080	518	8,765	1,724	968	552	224
1954 ..	297,468	278,504	489	9,773	1,389	939	639	232
1955 ..	314,545	335,473	541	11,003	1,619	1,599	773	386
1956 ..	316,620	372,436	625	11,646	1,592	1,851	793	392
1957 ..	317,735	445,470	649	13,521	1,512	1,250	869	288
<b>INDUSTRIAL DEPARTMENT.</b>								
1939 ..	385,498	18,542	(a)	(a)	..	..	..	..
1953 ..	260,948	34,570	..	1,592	..	..	..	..
1954 ..	236,936	33,407	..	1,541	..	..	..	..
1955 ..	216,896	33,175	..	1,532	..	..	..	..
1956 ..	211,411	32,977	..	1,558	..	..	..	..
1957 ..	209,733	33,459	..	1,580	..	..	..	..

(a) Not available.

5. Policies Matured or Otherwise Discontinued in Australia.—The volume of business discontinued from various causes in each year is always large. In the following table, details are given of ordinary and industrial life assurance policies matured or otherwise discontinued in each State and the Australian Capital Territory during the year 1957.

## LIFE ASSURANCE: POLICIES MATURED OR OTHERWISE DISCONTINUED IN AUSTRALIA, 1957.

State or Territory. (a)	Assurance and Endowment.			Annuity Policies.		
	Number of Policies.	Sum Assured. (£'000.)	Annual Premiums. (£'000.)	Number of Policies.	Annuities per Annum. (£'000.)	Annual Premiums. (£'000.)
<b>ORDINARY DEPARTMENT.</b>						
New South Wales ..	81,752	51,825	1,858	2,226	158	53
Victoria ..	49,758	42,711	1,559	2,641	741	-349
Queensland(b) ..	28,615	19,099	607	47	3	5
South Australia(c) ..	15,194	11,124	432	71	4	1
Western Australia ..	11,626	8,169	303	29	3	1
Tasmania ..	6,653	4,854	170	334	9	3
Australian Capital Territory ..	-2,078	-2,438	-77	150	-61	-20
Australia(b) ..	191,520	135,344	4,852	5,498	857	(d)-308
<b>INDUSTRIAL DEPARTMENT.</b>						
New South Wales ..	112,202	10,274	536	..	..	..
Victoria ..	90,733	7,603	404	..	..	..
Queensland(b) ..	32,031	2,929	154	..	..	..
South Australia(c) ..	32,931	2,883	149	..	..	..
Western Australia ..	18,733	1,750	87	..	..	..
Tasmania ..	8,704	828	42	..	..	..
Australian Capital Territory ..	668	116	6	..	..	..
Australia(b) ..	296,002	26,383	1,378	..	..	..

(a) Location of register of policies. (b) Includes Papua and New Guinea. (c) Includes the Northern Territory. (d) The overall negative amount is due to an adjustment to the annual premiums on certain annuities which in previous years were treated as single premiums.

NOTE.—Minus sign (-) indicates excess of transfers to registers or other adjustment to number and value of policies.

Policies matured or otherwise discontinued in Australia during each of the years 1939 and 1953 to 1957 were as shown in the following table.

**LIFE ASSURANCE: POLICIES MATURED OR OTHERWISE DISCONTINUED IN AUSTRALIA.**

Year.	Assurance and Endowment Policies.			Annuity Policies.		
	Number of Policies.	Sum Assured. (£'000.)	Annual Premiums. (£'000.)	Number of Policies.	Annuities per Annum. (£'000.)	Annual Premiums. (£'000.)
<b>ORDINARY DEPARTMENT.</b>						
1939	80,912	24,786	(a)	275	17	(a)
1953	138,737	77,848	3,213	993	579	135
1954(b)	157,060	90,050	3,366	1,395	647	137
1955	164,151	105,883	4,045	1,449	668	228
1956	180,858	119,928	4,534	1,436	878	227
1957	191,520	135,344	4,852	5,498	857	(c)—308
<b>INDUSTRIAL DEPARTMENT.</b>						
1939	262,096	12,132	(a)	..	..	..
1953	252,906	19,299	1,042	1	..	..
1954(b)	290,959	22,007	1,190	..	..	..
1955(b)	277,790	22,799	1,214	..	..	..
1956	275,722	24,907	1,327	..	..	..
1957	296,002	26,383	1,378	..	..	..

(a) Not available. (b) Includes policies in existence at beginning of year which were discontinued as a result of the winding up of two companies. (c) See footnote (d) to previous table.

The number of policies and sums assured, excluding annuities, discontinued during the years 1939 and 1953 to 1957 and the cause for discontinuance are given in the following table:—

**LIFE ASSURANCE: POLICIES(a) MATURED OR OTHERWISE DISCONTINUED IN AUSTRALIA—CAUSE OF DISCONTINUANCE.**

Year.	Death or Maturity.	Surrender.	Forfeiture.	Other.	Total.
<b>ORDINARY DEPARTMENT: NUMBER OF POLICIES.</b>					
1939	22,529	18,409	39,382	— 128	80,192
1953	40,836	53,064	37,027	7,810	138,737
1954	45,386	62,238	41,287	(b) 8,149	157,060
1955	48,224	67,929	42,941	5,057	164,151
1956	52,876	72,659	44,073	11,250	180,858
1957	55,923	77,937	42,981	14,679	191,520
<b>ORDINARY DEPARTMENT: SUM ASSURED. (£'000.)</b>					
1939	5,612	5,863	13,414	— 103	24,786
1953	13,107	34,026	25,792	4,923	77,848
1954	14,904	41,344	28,770	(b) 5,032	90,050
1955	16,012	50,065	35,467	4,339	105,883
1956	18,042	53,378	37,766	10,742	119,928
1957	19,475	60,231	41,868	13,770	135,344
<b>INDUSTRIAL DEPARTMENT: NUMBER OF POLICIES.</b>					
1939	73,585	33,766	154,328	417	262,096
1953	146,134	51,044	55,289	439	252,906
1954	157,150	51,917	59,828	(b) 22,064	290,959
1955	167,060	54,895	54,922	(b) 913	277,790
1956	171,748	60,531	61,276	— 17,833	275,722
1957	174,327	66,940	54,612	123	296,002
<b>INDUSTRIAL DEPARTMENT: SUM ASSURED. (£'000.)</b>					
1939	2,759	1,372	7,976	25	12,132
1953	6,285	5,383	7,569	62	19,299
1954	6,849	5,877	8,484	(b) 797	22,007
1955	7,517	6,574	8,675	(b) 33	22,799
1956	7,944	7,828	9,994	— 859	24,907
1957	8,439	8,722	9,186	36	26,383

(a) Excludes annuities. (b) See note (b) to previous table.

NOTE.—Minus sign (—) indicates excess of transfers to registers or other adjustment to number and value of policies.

6. Premiums and Claims, Australia.—(i) *Premiums. (a) Ordinary Business.* Details of revenue from premiums in respect of the ordinary business of all offices doing business in Australia are shown in the following tables for each State and the Australian Capital Territory for the year 1957:—

**ORDINARY LIFE ASSURANCE: AUSTRALIAN REVENUE FROM PREMIUMS, 1957.**  
(£'000.)

State or Territory.(a)	Assurance and Endowment Premiums.		Consideration for Annuities.		Total.
	Single Premiums.	Other Premiums.	Single Premiums.	Other Premiums.	
New South Wales .. ..	181	28,832	122	590	29,725
Victoria .. ..	230	24,561	672	1,191	26,654
Queensland(b) .. ..	148	11,299	33	28	11,508
South Australia(c) .. ..	28	8,080	16	23	8,147
Western Australia .. ..	15	5,486	8	22	5,531
Tasmania .. ..	6	2,752	5	29	2,792
Australian Capital Territory .. ..	4	1,634	12	258	1,908
<b>Australia(b) .. ..</b>	<b>612</b>	<b>82,644</b>	<b>868</b>	<b>2,141</b>	<b>86,265</b>

(a) Location of register of policies.

(b) Includes Papua and New Guinea.

(c) Includes the Northern Territory.

(b) *Industrial Business.* Details of revenue from premiums in respect of the industrial business of all offices doing business in Australia are shown in the following table for each State and the Australian Capital Territory for the year 1957:—

**INDUSTRIAL LIFE ASSURANCE: AUSTRALIAN REVENUE FROM PREMIUMS, 1957.**  
(£'000.)

State or Territory.(a)	Assurance and Endowment Premiums.		Total.
	Single Premiums.	Other Premiums.	
New South Wales .. ..	2	5,686	5,688
Victoria .. ..	2	4,663	4,665
Queensland(b) .. ..	1	1,837	1,838
South Australia(c) .. ..	..	1,501	1,501
Western Australia .. ..	1	974	975
Tasmania .. ..	..	365	365
Australian Capital Territory .. ..	..	9	9
<b>Australia(b) .. ..</b>	<b>6</b>	<b>15,035</b>	<b>15,041</b>

(a) Location of register of policies.

(b) Includes Papua and New Guinea.

(c) Includes the Northern Territory.

(c) *Ordinary and Industrial Business.* The following table shows, for each of the years 1939 and 1953 to 1957, the aggregate Australian income from premiums in respect of both ordinary and industrial business of all offices doing business in Australia:—

**LIFE ASSURANCE: AUSTRALIAN REVENUE FROM PREMIUMS.**  
(£'000.)

Year.	Ordinary Department.			Industrial Department.	Ordinary and Industrial Departments Combined.
	Assurance and Endowment Premiums.	Consideration for Annuities.	Total.		
1939 .. ..	13,954	184	14,138	6,490	20,628
1953 .. ..	53,114	2,029	55,143	13,888	69,031
1954 .. ..	59,761	2,178	61,939	14,285	76,224
1955 .. ..	66,811	2,529	69,340	14,614	83,954
1956 .. ..	74,413	2,700	77,113	15,002	92,115
1957 .. ..	83,256	3,009	86,265	15,041	101,306

(ii) *Claims, etc., Paid.* Details of the claims, etc., paid on policies in each State and the Australian Capital Territory during the year 1957 are shown in the following table:—

**LIFE ASSURANCE : PAYMENTS TO POLICY-HOLDERS IN AUSTRALIA, 1957.**  
(£'000.)

State or Territory.(a)	Claims.		Surrenders.	Annuities.	Cash Bonuses.	Total.
	Death or Disability	Maturity.				
<b>ORDINARY DEPARTMENT.</b>						
New South Wales .. ..	4,099	4,334	3,148	175	48	11,804
Victoria .. ..	3,710	4,029	3,074	210	51	11,074
Queensland(b) .. ..	1,787	1,711	1,033	26	10	4,567
South Australia(c) .. ..	1,069	1,051	590	27	12	2,749
Western Australia .. ..	677	654	490	18	11	1,850
Tasmania .. ..	399	317	259	16	3	994
Australian Capital Territory .. ..	195	155	231	21	..	602
<b>Australia(b) .. ..</b>	<b>11,936</b>	<b>12,251</b>	<b>8,825</b>	<b>493</b>	<b>135</b>	<b>33,640</b>
<b>INDUSTRIAL DEPARTMENT.</b>						
New South Wales .. ..	348	3,188	628	..	..	4,164
Victoria .. ..	288	2,881	427	..	..	3,596
Queensland(b) .. ..	105	894	169	..	..	1,168
South Australia(c) .. ..	90	767	125	..	..	982
Western Australia .. ..	52	438	106	..	..	596
Tasmania .. ..	18	289	42	..	..	349
Australian Capital Territory .. ..	..	3	1	..	..	4
<b>Australia(b) .. ..</b>	<b>901</b>	<b>8,460</b>	<b>1,498</b>	<b>..</b>	<b>..</b>	<b>10,859</b>

(a) Location of register of policies.  
the Northern Territory.

(b) Includes Papua and New Guinea.

(c) Includes

In the following table details are given of claims, etc., paid on policies in Australia for each of the years 1939 and 1953 to 1957:—

**LIFE ASSURANCE: PAYMENTS TO POLICY-HOLDERS IN AUSTRALIA.**  
(£'000.)

Year.	Claims.	Surrenders.	Annuities.	Cash Bonuses.	Total.
<b>ORDINARY DEPARTMENT.</b>					
1939 .. ..	7,935	1,843	220	260	10,258
1953 .. ..	16,739	3,982	391	126	21,238
1954 .. ..	18,854	4,938	404	129	24,325
1955 .. ..	20,105	6,109	430	218	26,862
1956 .. ..	22,436	7,123	472	180	30,211
1957 .. ..	24,187	8,825	493	135	33,640
<b>INDUSTRIAL DEPARTMENT.</b>					
1939 .. ..	3,132	499	..	..	3,631
1953 .. ..	6,879	927	..	..	7,806
1954 .. ..	7,527	972	..	..	8,499
1955 .. ..	8,311	1,056	..	..	9,367
1956 .. ..	8,767	1,270	..	..	10,037
1957 .. ..	9,361	1,498	..	..	10,859

7. Total Revenue and Expenditure.—(i) *Total Revenue.* The following table shows particulars of the total life assurance revenue derived by life assurance offices from sources within and beyond Australia during each of the years 1939 and 1953 to 1957:—

**ORDINARY AND INDUSTRIAL LIFE ASSURANCE: TOTAL REVENUE.**  
(£'000.)

Year.	Assurance and Endowment Premiums.	Con-sideration for Annuities Granted.	Interest, Dividends and Rents. (a)	All other Revenue.	Total Revenue.
<b>ORDINARY BUSINESS.</b>					
1939 .. .. .	21,568	303	9,901	17	31,789
1953 .. .. .	72,389	2,614	22,508	2,545	100,056
1954 .. .. .	80,701	2,824	25,679	676	109,880
1955 .. .. .	89,353	3,240	29,196	548	122,337
1956 .. .. .	98,689	3,488	33,557	416	136,150
1957 .. .. .	109,353	4,081	38,678	353	152,465
<b>INDUSTRIAL BUSINESS.</b>					
1939 .. .. .	7,863	..	2,127	61	10,051
1953 .. .. .	15,975	..	4,415	603	20,993
1954 .. .. .	16,402	..	4,812	219	21,433
1955 .. .. .	16,757	..	5,195	179	22,131
1956 .. .. .	17,174	..	5,637	28	22,839
1957 .. .. .	17,210	..	6,077	29	23,316

(a) Gross includes taxes thereon and rates.

(ii) *Total Expenditure.* The next table supplies details of the total expenditure, both within and beyond Australia, of life assurance offices during each of the years 1939 and 1953 to 1957:—

**ORDINARY AND INDUSTRIAL LIFE ASSURANCE: TOTAL EXPENDITURE.**  
(£'000.)

Year.	Claims and Annuities paid.	Surrenders.	Cash Bonuses paid to Policy-holders.	Com-mission.	Transfers to Profit and Loss Account including Share-holders' Dividends.	All other Expendi-ture.(a)	Total Expendi-ture.
<b>ORDINARY BUSINESS.</b>							
1939 .. .. .	12,320	2,668	380	1,483	125	3,867	20,843
1953 .. .. .	25,905	5,636	178	5,964	122	11,793	49,598
1954 .. .. .	28,772	6,739	178	6,724	132	11,709	54,254
1955 .. .. .	30,398	8,187	280	7,419	173	12,823	59,280
1956 .. .. .	33,233	9,506	267	7,968	165	13,509	64,648
1957 .. .. .	35,944	11,463	238	9,160	223	16,002	73,030
<b>INDUSTRIAL BUSINESS.</b>							
1939 .. .. .	3,763	576	..	1,619	72	1,278	7,308
1953 .. .. .	8,348	1,053	..	2,421	130	3,978	15,930
1954 .. .. .	9,124	1,096	..	2,399	88	3,408	16,115
1955 .. .. .	9,994	1,185	..	2,406	28	3,342	16,955
1956 .. .. .	10,490	1,417	..	2,515	65	3,430	17,917
1957 .. .. .	11,218	1,648	..	2,538	78	3,921	19,403

(a) Includes other expenses of management, licence fees, rates and taxes, etc.

8. **Liabilities and Assets.**—(i) *General.* The liabilities of the Australian offices consist mainly of their assurance funds, but in the case of public companies there is a further liability on account of the shareholders' capital. The assets consist chiefly of government and municipal securities, mortgages, loans on policies, landed and house property, etc. Loans on personal security are granted by very few of the Australian offices. Separate details of liabilities and assets in respect of Australian business are not available.

(ii) *Total Liabilities and Assets.* In the two tables which follow, the details of liabilities and assets relate to all business (Australian and overseas) of Australian companies, the life assurance business of the two State Government offices, all business of the Provident Life Assurance Co. Ltd. (incorporated in New Zealand) and the Australian business only of the Prudential Assurance Co. Ltd. (incorporated in England). For various reasons, several offices do not attempt the dissection of liabilities and assets between the industrial and ordinary branches, and, therefore, the figures in the following tables relate to the ordinary and industrial branches combined. Details of the total liabilities of life assurance offices for the year 1957 are given in the following table :—

**ORDINARY AND INDUSTRIAL LIFE ASSURANCE : TOTAL LIABILITIES, 1957.**

(£'000.)

Item.	Life Assurance Business.	Other Classes of Business.	Total Liabilities.
<i>Shareholders' Capital—</i>			
Authorized .. .. .	..	5,278	5,278
Less Unissued .. .. .	..	2,495	2,495
Subscribed Capital .. .. .	..	2,783	2,783
Paid-up—			
In Money .. .. .	..	2,419	2,419
Otherwise than in Money .. .. .	..	79	79
Total .. .. .	..	2,498	2,498
<i>Life Assurance Statutory Funds—</i>			
Ordinary Department .. .. .	847,856	..	847,856
Industrial Department .. .. .	132,973	..	132,973
Total .. .. .	980,829	..	980,829
<i>Funds in respect of Other Classes of Business</i>	..	1,881	1,881
General Reserves .. .. .	19,560	2,132	21,692
Profit and Loss Account Balance .. .. .	..	243	243
Total, Shareholders' Capital, Assurance Funds and Reserves .. .. .	1,000,389	6,754	1,007,143
<i>Other Liabilities—</i>			
Deposits .. .. .	6,111	4,730	10,841
Staff Provident and Superannuation Funds .. .. .	240	335	575
Claims admitted or intimated but not paid .. .. .	11,059	280	11,339
Annuities due but not paid .. .. .	2	..	2
Premiums Paid in Advance and in Suspense .. .. .	725	15	740
Sundry Creditors .. .. .	3,858	384	4,242
Bank Overdraft .. .. .	2,178	257	2,435
Reserves and Provisions for Taxation .. .. .	5,057	197	5,254
All Other Liabilities .. .. .	718	12	730
Total Liabilities .. .. .	1,030,337	12,964	1,043,301

The following table furnishes details of the total assets of life assurance offices for the year 1957.

**ORDINARY AND INDUSTRIAL LIFE ASSURANCE : TOTAL ASSETS, 1957.**  
(£'000.)

Item.	Life Assurance Business.	Other Classes of Business.	Total.	Amount of Total Assets held in Australia.
Freehold and leasehold property, office premises, furniture, etc. .. ..	49,643	729	50,372	40,156
<b>Loans—</b>				
On Mortgage .. ..	346,440	241	346,681	261,011
On Policies of the Company including Advances of Premiums .. ..	43,638	..	43,638	32,880
Other Loans .. ..	29,105	902	30,007	29,412
<b>Total Loans</b> .. ..	<b>419,183</b>	<b>1,143</b>	<b>420,326</b>	<b>323,303</b>
<b>Investments—</b>				
<b>Government Securities—</b>				
Australia .. ..	221,624	6,887	228,511	217,055
Other .. ..	53,468	89	53,557	..
<b>Securities of Local and Semi-Governmental Bodies</b> .. ..	159,571	353	159,924	121,465
Other Investments .. ..	109,578	2,857	112,435	92,561
<b>Total Investments</b> .. ..	<b>544,241</b>	<b>10,186</b>	<b>554,427</b>	<b>431,081</b>
Cash on Deposit, Current Account and in hand .. ..	1,658	165	1,823	1,606
Other Assets .. ..	15,612	741	16,353	12,603
<b>Total Assets</b> .. ..	<b>1,030,337</b>	<b>12,964</b>	<b>1,043,301</b>	<b>808,749</b>

(iii) *Assets held in Australia.* Details of assets held in Australia for the years 1939 and 1953 to 1957 are set out in the following table:—

**ORDINARY AND INDUSTRIAL LIFE ASSURANCE(a): ASSETS HELD IN AUSTRALIA.**  
(£'000.)

Particulars.	1939. (b)	1953.	1954.	1955.	1956.	1957.
Landed and house property .. ..	12,823	16,840	18,060	22,345	30,290	39,276
Government and municipal securities .. ..	115,712	301,254	320,754	320,471	326,323	338,520
Other investments .. ..	6,700	51,885	58,173	71,756	80,961	92,561
Loans on mortgages .. ..	61,720	149,507	165,555	197,710	230,688	261,011
Loans on companies' policies .. ..	22,445	21,745	23,096	25,661	29,315	32,880
Other loans .. ..	(c)	22,008	22,085	23,923	27,663	29,412
All other assets .. ..	8,116	11,685	12,609	13,958	14,247	15,089
<b>Total Assets held in Australia</b>	<b>227,516</b>	<b>574,924</b>	<b>620,332</b>	<b>675,824</b>	<b>739,487</b>	<b>808,749</b>

(a) Life assurance and other classes of business and other investments.

(b) Australian assets.

(c) Included with other investments.

9. **Loans.**—In the following table, details are given of new loans granted by life assurance companies during each of the years ended 31st December, 1954 to 1958. The information has been compiled from monthly returns furnished by each company. New loans granted by the Government Insurance Office of New South Wales and the Queensland State Government Insurance Office are not included. Advances of premiums are also excluded.

**LIFE ASSURANCE COMPANIES : NEW LOANS GRANTED.**  
(£'000.)

Particulars.	1954.	1955.	1956.	1957.	1958.
<b>CLASS OF SECURITY.</b>					
Mortgage of Real Estate ..	33,216	50,081	47,707	48,969	53,953
Companies' Policies ..	3,725	4,793	5,903	6,334	7,470
Other .. .. .	4,113	3,415	4,250	4,431	5,399
<b>Total .. .. .</b>	<b>41,054</b>	<b>58,289</b>	<b>57,860</b>	<b>59,734</b>	<b>66,822</b>
<b>STATE OR TERRITORY.(a)</b>					
New South Wales .. ..	17,699	25,884	22,542	26,454	30,096
Victoria .. .. .	12,196	17,534	20,121	17,115	17,699
Queensland(b) .. .. .	4,158	3,400	4,548	4,696	6,653
South Australia(c) .. ..	2,765	4,800	4,698	5,724	6,047
Western Australia .. ..	3,005	4,581	3,550	3,318	3,556
Tasmania .. .. .	1,176	2,018	2,324	2,334	2,576
Australian Capital Territory	55	72	77	93	195
<b>Total .. .. .</b>	<b>41,054</b>	<b>58,289</b>	<b>57,860</b>	<b>59,734</b>	<b>66,822</b>

(a) State or Territory of location of mortgage, registration of policy, or residence of borrower.  
(b) Includes Papua and New Guinea. (c) Includes Northern Territory.

### § 3. Fire, Marine and General Insurance.

1. **General.**—The following statistics, which are in respect of the Australian business of companies operating in Australia and State Government insurance offices, conform to the following definitions and should be interpreted in accordance therewith.

(a) Premiums represent the full amount receivable in respect of policies issued and renewed in the year, less returns, rebates and bonuses paid or credited to policy-holders during the year. They are not adjusted to provide for premiums unearned at the end of the year and consequently the amounts differ from "earned premium income" appropriate to the year. When business is increasing, as in recent years, premiums receivable (as shown in the statistics) are greater than "earned premium income" appropriate to the year. The converse applies when business is declining.

(b) Claims or losses include provision for outstanding claims and represent claims or losses incurred in the year. Salvage and other amounts recoverable have been deducted.

(c) Contributions to Fire Brigades, Commission and Agents' Charges, and Expenses of Management represent mainly charges paid during the year.

(d) Taxation represents mainly payments made during the year, and includes income tax, pay-roll tax, licence fees, stamp duty (where paid by the company), etc. Income tax paid during the year is based on the income of earlier years.

The tables contain selected items of statistics and the information shown is not suitable for the construction of a "profit and loss" statement or "revenue" account.

In cases where the business is underwritten in one State and the risk is situated in another the business is included in the State in which the policy was issued.

During 1957-58, revenue from premiums amounted to £154,475,000 and that from net interest on investments, etc., to £5,740,000, a total of £160,215,000. Expenditure on claims amounted to £87,733,000, contributions to fire brigades £3,941,000, commission and agents' charges £15,257,000, expenses of management £25,186,000 and taxation £5,164,000, a total of £137,281,000.

2. **States.**—The following table shows, for each State, the aggregate premium income less reinsurances and returns, and claims or losses less amounts recoverable, for all classes of insurance other than life for the years 1938-39 and 1953-54 to 1957-58.

**FIRE, MARINE AND GENERAL INSURANCE : PREMIUMS AND CLAIMS—STATES**  
(£'000.)

State.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>GROSS PREMIUMS, LESS REINSURANCES AND RETURNS.</b>						
New South Wales(a) .. .. .	6,943	38,381	42,696	48,726	53,050	59,875
Victoria .. .. .	4,505	30,775	33,946	39,110	45,583	50,764
Queensland .. .. .	2,327	12,016	13,801	15,377	16,702	19,106
South Australia .. .. .	1,245	8,041	9,115	10,244	11,836	12,209
Western Australia .. .. .	1,373	6,224	6,854	7,362	7,532	8,532
Tasmania .. .. .	457	2,547	2,813	3,151	3,355	3,989
<b>Total .. .. .</b>	<b>16,850</b>	<b>97,984</b>	<b>109,225</b>	<b>123,970</b>	<b>138,111</b>	<b>154,475</b>

**GROSS CLAIMS OR LOSSES, LESS AMOUNTS RECOVERABLE.**

New South Wales(a) .. .. .	3,842	20,981	23,302	28,888	32,753	35,390
Victoria .. .. .	2,194	16,709	20,303	23,081	26,542	28,603
Queensland .. .. .	1,071	5,981	8,234	8,717	10,707	11,110
South Australia .. .. .	487	4,835	6,402	5,441	6,208	5,898
Western Australia .. .. .	731	3,078	3,671	4,064	4,678	4,715
Tasmania .. .. .	204	1,084	1,372	1,655	1,644	2,017
<b>Total .. .. .</b>	<b>8,529</b>	<b>52,668</b>	<b>63,284</b>	<b>71,846</b>	<b>82,532</b>	<b>87,733</b>

(a) From 1947-48 excludes Workers' Compensation Insurance in coal-mining industry in New South Wales.

3. **Classes of Insurance.**—The following statement shows premiums and claims in respect of the principal classes of risks, for the years 1938-39 and 1953-54 to 1957-58 :—

**FIRE, MARINE AND GENERAL INSURANCE : PREMIUMS AND CLAIMS—**  
**PRINCIPAL CLASSES OF RISK, AUSTRALIA.**  
(£'000.)

Class of Risk.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>GROSS PREMIUMS, LESS REINSURANCES AND RETURNS.</b>						
Fire .. .. .	5,597	22,170	23,603	25,807	27,919	29,854
Workers' Compensation(a) .. .. .	4,361	20,279	22,133	25,660	28,976	33,772
Motor Vehicle—						
Compulsory Third Party .. .. .	} 3,848	{ 8,496	10,480	12,789	14,772	16,064
Other .. .. .						
Marine .. .. .	1,018	6,056	6,637	7,179	6,916	7,292
Personal Accident .. .. .	554	2,479	2,911	3,391	3,990	4,733
All other .. .. .	1,472	12,699	14,052	16,485	17,687	20,633
<b>Total .. .. .</b>	<b>16,850</b>	<b>97,984</b>	<b>109,225</b>	<b>123,970</b>	<b>138,111</b>	<b>154,475</b>

**GROSS CLAIMS OR LOSSES, LESS AMOUNTS RECOVERABLE.**

Fire .. .. .	2,223	5,842	6,859	7,191	9,037	9,406
Workers' Compensation(a) .. .. .	2,972	14,542	18,641	20,383	23,515	24,473
Motor Vehicle—						
Compulsory Third Party .. .. .	} 2,324	{ 9,525	10,538	12,131	13,710	14,202
Other .. .. .						
Marine .. .. .	243	2,263	2,706	2,878	3,130	3,258
Personal Accident .. .. .	264	912	1,075	1,295	1,700	2,120
All other .. .. .	503	5,634	6,226	6,044	5,988	6,815
<b>Total .. .. .</b>	<b>8,529</b>	<b>52,668</b>	<b>63,284</b>	<b>71,846</b>	<b>82,532</b>	<b>87,733</b>

(a) From 1947-48 excludes Workers' Compensation in coal-mining industry in New South Wales.

## E. RETAIL HIRE PURCHASE OPERATIONS OF FINANCE BUSINESSES.

1. General.—Information relating to hire purchase operations in Australia is given in the following tables. Information in more detail may be found in the annual bulletin—*Finance, Part I*, and in monthly bulletins relating to hire purchase operations.

The statistics (the collection of which commenced in 1953) relate to businesses which finance the retail sale of goods, but do not retail goods themselves. These businesses cover public and private companies, partnerships, banks and other finance businesses. Businesses which finance hire purchase exclusively for their own employees are not included. All types of goods sold to final purchasers are included whether producer goods (such as plant and machinery) or consumer goods.

2. New Retail Agreements 1957-58.—Details of new retail agreements made during the year ended 30th June, 1958, are given in the following table.

## HIRE PURCHASE FINANCE COMPANIES: NEW RETAIL AGREEMENTS—STATES.

YEAR ENDED 30th JUNE, 1958.

State.	Number of Agreements.				Value of Goods. (£'000.)(a)				Amount Financed. (£'000.)(b)			
	Motor Vehicles, Tractors, etc.(c)	Plant and Machinery. (d)	Household and Personal Goods. (e)	Total.	Motor Vehicles, Tractors, etc.(c)	Plant and Machinery. (d)	Household and Personal Goods. (e)	Total.	Motor Vehicles, Tractors, etc.(c)	Plant and Machinery. (d)	Household and Personal Goods. (e)	Total.
N.S.W.(f)	124,864	8,210	310,670	443,744	91,814	5,860	35,101	132,775	55,583	3,786	28,448	87,817
Vic. ..	94,426	5,494	197,535	297,455	69,120	3,947	26,341	99,408	43,427	2,480	21,438	67,345
Qld. ..	57,337	4,340	148,398	210,075	41,594	2,756	9,364	53,714	24,647	1,749	7,395	33,791
S.A.(g) ..	40,356	1,948	86,880	129,184	26,798	1,413	6,840	35,051	16,302	844	5,634	22,780
W.A. ..	26,321	1,829	64,214	92,364	18,176	1,542	4,811	24,529	11,263	1,081	3,880	16,224
Tas. ..	14,885	620	18,593	34,098	10,307	386	1,460	12,153	6,224	238	1,142	7,604
Aust. ..	358,189	22,441	826,290	1,206,920	257,809	15,904	83,917	357,630	157,446	10,178	67,937	235,561

(a) Value at net cash or list price (excluding hiring charges and insurance). (b) Excludes hiring charges and insurance. (c) Includes new and used motor cars, motor cycles, commercial vehicles, tractors, caravans, motor parts and accessories. (d) Includes farm machinery and implements, earthmoving equipment, aircraft, industrial plant and machinery, business machines and equipment (including commercial refrigeration equipment), etc. (e) Includes furniture and furnishings, domestic refrigerators, electrical goods, television and accessories, radios, musical instruments, bicycles and other household and personal goods. (f) Includes the Australian Capital Territory. (g) Includes the Northern Territory.

3. Balances outstanding on Retail Agreements at 30th June.—Details of the balances outstanding on retail agreements at 30th June, 1954 to 1958, are given below:—

## HIRE PURCHASE FINANCE COMPANIES: BALANCES OUTSTANDING ON RETAIL AGREEMENTS—STATES.

(Including Hiring Charges and Insurance.)

(£'000.)

As at 30th June—	N.S.W. (a)	Vic.	Q'land.	S. Aust. (b)	W. Aust.	Tas.	Aust.
1954 .. ..	50,779	30,806	22,489	13,380	10,154	4,772	132,380
1955 .. ..	69,067	44,590	29,240	18,633	14,151	7,012	182,693
1956 .. ..	78,992	56,025	32,266	21,618	15,388	8,163	212,452
1957 .. ..	85,259	64,045	36,934	25,349	15,488	9,023	236,098
1958 .. ..	111,170	85,020	42,483	28,761	19,052	9,932	296,418

(a) Includes the Australian Capital Territory.

(b) Includes the Northern Territory.

## F. CAPITAL RAISINGS BY AUSTRALIAN COMPANIES.

1. **General.**—Information relating to capital raised by companies in Australia is given in the following tables. More detailed information may be found in the annual bulletin—*Finance, Part I.*, and in quarterly bulletins dealing with capital raisings.

The statistics (the collection of which commenced in July, 1954) relate to capital raised by companies through issues of shares, and in the case of listed companies through the issue of debentures, notes and similar securities and the acceptance of deposits, and in the case of unlisted companies, by way of loans secured over the entire assets of the company. Capital obtained by way of bank overdraft, trade credit, temporary advances, and loans secured over part only of the assets of the company is not included, and, in the case of unlisted companies, capital raised through loans not secured over any of the assets of the company is excluded.

Separate statistics are given for listed and unlisted companies. Listed companies are companies incorporated in Australia or the Australian territories and listed on one or more of the Australian stock exchanges. All other companies incorporated in Australia, including subsidiaries of listed companies, are classified as unlisted companies. Companies incorporated overseas, whether listed on an Australian stock exchange or not, are excluded from the statistics of share issues. However, subsidiaries of overseas companies if incorporated in Australia, are included. The statistics of new capital raised through issues of debentures, notes, etc., and the acceptance of deposits includes, in addition to capital raised by Australian companies, capital raised in this way from Australian sources by overseas public companies through their Australian offices.

The following are explanatory notes relating to some of the items shown in the tables:—

**New Money.** This is the net amount of cash transferred from the investing public to the companies. For this purpose, the investing public includes banks and life insurance companies (except when subscribing to issues by associated companies) and government and private superannuation funds, but excludes other Government agencies. Subscriptions by associated companies, whether local or overseas, are excluded. In the tables which follow, the amount of new money is obtained by deducting from the total cash raised the "amount not involving a net transfer of funds from the investing public."

**Amounts not involving new money.** These amounts include cash subscriptions received by issuing companies from associated companies. Such subscriptions represent inter-company transfers only, and do not involve a receipt of funds from the "investing public". Also included are amounts which, although subscribed by the "investing public" (i.e. subscribers other than "associated companies"), are not retained by the issuing company or its associates, but are used to redeem shares, debentures or unsecured notes, etc., or are used to purchase from individuals existing shares, debentures, etc., in other companies, including existing shares, etc., in associated and subsidiary companies. The funds used in this way are thus returned to another section of the "investing public", and do not represent a net transfer of cash from the "investing public" to the companies. (Besides these purchases of existing shares, etc., from individuals, purchases of existing shares, etc., from companies other than associates of the issuing company might also be included in this item, but the amounts involved are small and separate details have not been collected.)

2. **Listed Companies (a).**—Details of New Capital raised through issues of shares, debentures, or registered notes or accepting deposits for each of the years 1954–55 to 1957–58 are given in the following table.

**LISTED AUSTRALIAN COMPANIES(a): NEW CAPITAL RAISED THROUGH ISSUES OF SHARES, DEBENTURES, OR REGISTERED NOTES, ETC.(b), OR ACCEPTING DEPOSITS(c).**

(£ million.)

Year.	Share Capital.						Debentures, Registered Notes and Deposits.		
	Value of Issues Commenced.	Non-Cash Issues Commenced. (d)	Cash Issues Commenced.	Cash Raised During Period. (e)	Amounts Not Involving New Money.	New Money.	Total Amount Raised. (f)	Amounts Not Involving New Money. (f)	New Money.
1954–55 ..	113.5	40.1	73.4	68.1	8.4	59.7	63.9	36.4	27.5
1955–56 ..	104.7	35.7	69.0	68.0	8.8	59.2	119.8	69.8	50.0
1956–57 ..	110.4	57.7	52.7	51.0	7.3	43.7	144.0	92.3	51.7
1957–58 ..	107.3	58.2	49.1	50.4	15.1	35.3	209.6	131.7	77.9

(a) Includes companies incorporated in the Australian Territories.

(b) Includes convertible notes.

(c) Deposits accepted by banks, life assurance companies, pastoral companies and building societies are not included.

(d) Includes bonus issues, conversion issues, issues in exchange for existing shares, etc.

(e) Amounts paid up on issues commenced during the year plus calls on issues commenced in earlier years.

(f) Includes non-cash issues.

3. **Unlisted Companies.**—Details of new capital raised by unlisted companies through issues of shares and loans secured by charges over the companies' entire assets are given in the following table for each of the years 1954-55 to 1957-58.

**UNLISTED COMPANIES(a): NEW CAPITAL RAISED THROUGH ISSUES OF SHARES AND LOANS SECURED BY CHARGES OVER THE COMPANIES' ENTIRE ASSETS.**

(£ million.)

Year.	Share Capital.						Loans secured by charges over the Companies' Entire Assets.		
	Value of Issues Com-menced.	Non-Cash Issues Com-menced. (b)	Cash Issues Com-menced.	Cash Raised During Period. (c)	Amounts Not In-volving New Money.	New Money.	Total Amount Raised (d)	Amounts Not In-volving New Money. (d)	New Money.
1954-55 ..	132.6	34.2	98.4	88.1	56.3	31.8	7.0	2.5	4.5
1955-56 ..	144.8	54.7	90.1	86.2	57.2	29.0	7.7	1.9	5.8
1956-57 ..	130.1	56.6	73.5	69.9	41.8	28.1	6.6	1.9	4.7
1957-58 ..	151.2	81.2	70.0	64.8	43.7	21.1	8.7	4.4	4.3

(a) Excludes companies incorporated in the Northern Territory and Australian External Territories. (b) Includes bonus issues, conversion issues, issues in exchange for existing shares, etc. (c) Amounts paid up on issues commenced during year plus calls on issues commenced in previous years. (d) Includes non-cash issues.

4. **Listed and Unlisted Companies.**—A summary of new money raised by listed and unlisted companies during each of the years 1954-55 to 1957-58 as shown in the preceding tables is given below.

**LISTED AND UNLISTED COMPANIES: NEW MONEY RAISED.**

(£ million.)

Year.	Listed Companies.			Unlisted Companies.			Grand Total.
	Share Capital.	Debentures Registered Notes and Deposits, etc.	Total.	Share Capital.	Loans Secured by Charges over the Companies' Entire Assets.	Total.	
1954-55 ..	59.7	27.5	87.2	31.8	4.5	36.3	123.5
1955-56 ..	59.2	50.0	109.2	29.0	5.8	34.8	144.0
1956-57 ..	43.7	51.7	95.4	28.1	4.7	32.8	128.2
1957-58 ..	35.3	77.9	113.2	21.1	4.3	25.4	138.6

**G. FRIENDLY SOCIETIES.**

1. **General.**—The total membership of friendly societies in Australia is just under 500,000 but as certain benefits, such as medical attendance and free medicines, and in many cases funeral expenses, are granted to members' families as well as to members themselves, this figure must be more than doubled to arrive at an estimate of the number of persons who receive some direct benefit from these societies, even when due allowance is made for young and unmarried members. Legislation has conferred certain privileges on friendly societies, but, on the other hand, it insists on their registration, and it is the duty of the Registrars in the various States, prior to registering a new society, to see that its proposed rules conform to the law, and that the scale of contribution is sufficient to provide the promised benefits. Societies are obliged to forward to the Registrar annual returns about their membership and their finances, and reports are published in most of the States dealing with the returns received.

2. **Societies, Members and Revenue.**—The following table sets out the number of societies, members, etc., and revenue and expenditure and funds of registered societies for the year 1955-56. More detailed information is available in *Finance, Part I., Bulletin No. 48.*

FRIENDLY SOCIETIES(a) : 1955-56.

Particulars.	New South Wales.	Victoria.	Queens-	South	Western	Tas-	Total.
	(b)	(c)	land.	Aus- tralia.	Aus- tralia.	mania. (c)	
	No.	No.	No.	No.	No.	No.	No.
Registered Societies .. .. .	39	150	23	14	13	13	252
Branches .. .. .	2,101	1,296	508	645	277	131	4,958
Benefit members at end of year ..	158,007	172,315	53,286	57,216	21,949	10,317	473,090
Average benefit members during year ..	160,371	173,361	53,937	58,206	22,267	13,943	482,085
Members who received sick pay ..	(d)	33,938	9,720	11,685	3,907	2,003	(d)
Total weeks sick pay granted ..	(d)	464,573	134,109	175,146	56,546	29,764	(d)
Average weeks per member sick ..	(d)	13.7	13.8	15.0	14.5	14.9	(d)
Deaths of benefit members ..	(d)	2,607	983	1,069	337	306	(d)
Proportion of deaths per 1,000 mem- bers (average) .. .. .	(d)	15.0	18.2	18.4	15.1	21.9	(d)
<b>Revenue—</b>	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
Entrance fees, levies and members' contributions .. .. .	1,909	1,472	433	648	387	40	4,889
Interest, dividends and rents .. ..	319	400	132	198	54	26	1,417
All other revenue .. .. .	113	57		27	79	12	
<b>Total .. .. .</b>	<b>2,341</b>	<b>1,929</b>	<b>565</b>	<b>873</b>	<b>520</b>	<b>78</b>	<b>6,306</b>
<b>Expenditure—</b>							
Sick pay .. .. .	216	268	80	85	26	15	690
Medical attendance and medicine ..	1,143	730	210	303	298	7	2,691
Sums payable at death .. .. .	132	69	47	55	19	22	344
Administration .. .. .	499	369	123	151	59	17	1,218
All other expenditure .. .. .	79	165		141	75	9	469
<b>Total .. .. .</b>	<b>2,069</b>	<b>1,601</b>	<b>460</b>	<b>735</b>	<b>477</b>	<b>70</b>	<b>5,412</b>
<b>Total Funds .. .. .</b>	<b>8,287</b>	<b>9,997</b>	<b>3,188</b>	<b>4,533</b>	<b>1,392</b>	<b>681</b>	<b>28,078</b>

(a) Excludes juvenile branches, dispensaries, medical institutes and certain miscellaneous societies. Receipts and payments of subsidy under the Commonwealth medical and hospital benefit schemes are excluded. (b) Includes the Australian Capital Territory. (c) Year 1956. (d) Not available.

H. PROBATES AND LETTERS OF ADMINISTRATION.

The following particulars give some idea of the number and value of estates of deceased persons in each State for the latest year for which information is available. Owing to differences in legislation in the various States, the figures are not entirely comparable.

PROBATES AND LETTERS OF ADMINISTRATION.

Particulars.	New South Wales.	Victoria.	Queens-	South	Western	Tasmania.
	1956-57.	1956.	land.	Australia.	Australia.	1956.
	(a)		1955-56.	1956.	1956.	(b)
<b>Probates—</b>						
Estates .. .. .	No. 19,675	9,961	1,800	3,039	2,420	1,055
Gross Value .. .. .	£'000 (c) 72,599	72,599	18,117	17,851	14,051	7,090
Net Value .. .. .	£'000 (c) 98,686	68,776	(c)	16,498	11,872	6,749
<b>Letters of Administration—</b>						
Estates .. .. .	No. (c) 2,649	288	934	312	225	
Gross Value .. .. .	£'000 (c) 1,157	1,830	779	692	606	
Net Value .. .. .	£'000 (c) 1,624	(c)	1,624	692	529	
<b>Total—</b>						
Estates .. .. .	No. (c) 12,510	2,088	3,973	2,732	1,280	
Gross Value .. .. .	£'000 (c) 19,274	19,274	19,681	14,830	7,696	
Net Value .. .. .	£'000 (c) 28,310	18,122	18,122	12,564	7,278	

(a) Total estates of deceased persons assessed for death duty. (b) Estates dealt with by the Taxation Department. (c) Not available.

I. LOTTERIES AND BETTING.

§ 1. Lotteries.

State Governments operate lotteries in New South Wales, Queensland and Western Australia. Tattersall Lotteries and Tasmanian Lotteries are operated under Government licences in Victoria and Tasmania respectively.

New South Wales State Lotteries are conducted in accordance with the New South Wales State Lotteries Act, 1930 and the first drawing took place on 20th August, 1931. Net profits of the lotteries, with the exception of the net profits of the Opera House lotteries introduced in November, 1957, are paid to the Consolidated Revenue Fund from which grants are made to hospitals. The net profits of the Opera House lotteries are paid to the Opera House Account.

Tattersall Lotteries, which were previously conducted in Tasmania, were transferred to Victoria in 1954 and the first drawing in Melbourne took place on 8th July, 1954. The Tattersall Consultations Act, 1953, provides that prizes in each consultation shall be not less than sixty per cent. of total subscriptions to that consultation, and that a duty equal to thirty-one per cent. of subscriptions shall be paid into the Consolidated Revenue Fund from which an equivalent amount will be paid out into the Hospitals and Charities Fund and the Mental Hospitals Fund in such proportions as the Treasurer determines from time to time.

In Queensland, the Golden Casket Art Union commenced in 1916 with the specific object of augmenting the funds of the Queensland War Council. Subsequently, Anzac Cottages and Nurses Quarters Funds benefited until 1920 but since then net profits have been paid to the Department of Health and Home Affairs (Hospitals, Motherhood and Child Welfare Trust Fund) and used for the maintenance of hospitals, grants to institutions, and for motherhood and child welfare purposes. A stamp duty is imposed on tickets sold. The proceeds of this are paid to Consolidated Revenue Fund.

In Western Australia, lotteries are conducted by the Lotteries Commission under the Lotteries Control Act of 1932. Profits are paid by the Commission to hospitals and other charities.

In Tasmania, lotteries are subject to the provisions of the Racing and Gaming Act 1950–1952. With the transfer of Tattersall Lotteries from Hobart to Melbourne, Tasmanian Lotteries commenced operations under Government licence and the first drawing took place on 30th June, 1954. The stamp duty on tickets sold and the tax on prize money are paid into Consolidated Revenue.

Details of ticket sales, prizes allotted, and taxes paid and other net contributions to State Government revenues relating to lotteries drawn during each of the years ended 30th June, 1954 to 1958 are given in the following table:—

**LOTTERIES: VALUE OF TICKET SALES, PRIZES ALLOTTED, TAXES PAID AND OTHER NET CONTRIBUTIONS TO STATE GOVERNMENT REVENUES.**

(£'000.)

Year ended 30th June.	New South Wales.	Victoria.	Queensland.	Western Australia.	Tasmania.	Total.
<b>TICKET SALES.</b>						
1954 .. ..	10,610	..	5,760	1,100	4,763	22,233
1955 .. ..	11,268	8,450	6,115	1,112	1,703	28,648
1956 .. ..	11,728	8,850	6,045	1,112	3,875	31,610
1957 .. ..	12,830	9,200	6,175	1,163	3,525	32,893
1958 .. ..	14,150	8,950	6,725	1,150	1,427	32,402
<b>PRIZES ALLOTTED.</b>						
1954 .. ..	6,767	..	3,679	596	2,899	13,941
1955 .. ..	7,180	5,070	3,908	603	1,036	17,797
1956 .. ..	7,472	5,310	3,863	605	2,359	19,609
1957 .. ..	8,211	5,520	3,946	654	2,146	20,477
1958 .. ..	9,087	5,370	4,285	640	868	20,250
<b>TAXES PAID AND OTHER NET CONTRIBUTIONS TO STATE GOVERNMENT REVENUES.</b>						
1954 .. ..	3,469	..	1,731	357	1,387	6,944
1955 .. ..	3,689	2,620	1,836	364	496	9,005
1956 .. ..	3,842	2,744	1,798	362	1,129	9,875
1957 .. ..	4,184	2,852	1,822	353	1,027	10,238
1958 .. ..	(a) 4,593	2,775	1,895	353	415	10,031

(a) Includes £492,000 paid to the Opera House Account.

**§ 2. Betting.**

Estimates of totalizator investments and investments with licensed bookmakers for the years ended 30th June 1954 to 1958 are given in the following table.

GOVERNMENT AND SEMI-GOVERNMENTAL PENSION AND SUPERANUATION 781  
SCHEMES.

**TOTALIZATOR INVESTMENTS AND INVESTMENTS WITH LICENSED  
BOOKMAKERS.**

(£'000.)

Year ended 30th June—	New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia.	Tasmania.	Total.
<b>TOTALIZATOR INVESTMENTS.(a)</b>							
1954 .. ..	14,202	10,172	2,925	2,497	3,002	993	33,791
1955 .. ..	13,101	9,442	2,713	2,332	2,912	981	31,481
1956 .. ..	13,645	10,669	2,530	2,267	2,263	1,004	32,378
1957 .. ..	13,213	11,573	2,361	2,172	2,177	976	32,472
1958 .. ..	13,831	11,740	2,579	2,236	2,498	944	33,828
<b>INVESTMENTS WITH LICENSED BOOKMAKERS.(b)</b>							
1954 .. ..	114,402	55,000	(c)	27,197	(c)	11,662	(c)
1955 .. ..	112,876	45,000	(c)	26,721	(c)	10,828	(c)
1956 .. ..	113,225	52,000	(c)	30,019	(d)24,012	11,577	(c)
1957 .. ..	113,170	52,715	(c)	29,932	25,564	11,505	(c)
1958 .. ..	113,147	64,250	(c)	28,335	27,005	12,031	(c)

(a) Estimated from taxes on totalizators. (b) Estimated from taxes on betting with licensed bookmakers. (c) Not available. (d) Eleven months ended 30th June, 1956.

**J. GOVERNMENT, SEMI-GOVERNMENTAL AND PARLIAMENTARY PENSION AND SUPERANNUATION SCHEMES.**

**§ 1. Government and Semi-Governmental Pension and Superannuation Schemes.**

The Commonwealth and all State Governments have established pension or superannuation schemes for their employees. These schemes are operated through funds to which both the Government and the employees make contributions. Employees of semi-governmental authorities are in some cases covered by the Commonwealth or State Government scheme and in other cases by a separate scheme of the authority.

In the following table, aggregate details are given, for the year 1956-57, of the receipts, expenditure, accumulated funds and number of contributors and pensioners of the Commonwealth and State Government and main semi-governmental schemes. The funds included are:—

- (a) *Commonwealth*.—The Superannuation Fund and Defence Forces Retirement Benefits Fund.
- (b) *New South Wales*.—State Superannuation Fund, Government Railways Superannuation Fund and Police Superannuation and Reward Fund.
- (c) *Victoria*.—The State Superannuation Fund, Police Superannuation Fund, Police Pensions Fund, Melbourne Harbor Trust Superannuation Account, Geelong Harbor Trust Superannuation Fund, Melbourne and Metropolitan Board of Works Superannuation Fund, State Electricity Commission Provident Fund, Gas and Fuel Corporation Superannuation Fund, Metropolitan Fire Brigades Board Superannuation Fund, Country Fire Authority Superannuation Fund and Port Phillip Pilots' Sick and Superannuation Fund.
- (d) *Queensland*.—Public Service Superannuation Fund and Police Superannuation Fund.
- (e) *South Australia*.—South Australia Superannuation Fund, Police Pensions Fund and Public Service Superannuation Fund.
- (f) *Western Australia*.—The Superannuation Fund.
- (g) *Tasmania*.—Public Service Superannuation Fund (Old and New Funds), Police Provident Fund and State Teachers' Superannuation Fund.

**GOVERNMENT AND SEMI-GOVERNMENTAL PENSION AND SUPERANNUATION SCHEMES, 1956-57.**

Particulars.	C'wth.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
<i>Receipts—</i>								
Contributions—								
Employees ..	7,112	4,087	3,323	375	888	342	423	16,550
Government ..	4,871	8,168	4,302	554	914	561	296	19,666
Interest ..	1,996	2,629	1,552	311	461	166	143	7,258
Other ..	-2	6	22	5	5	1	6	43
<i>Total ..</i>	<i>13,977</i>	<i>14,890</i>	<i>9,199</i>	<i>1,245</i>	<i>2,268</i>	<i>1,070</i>	<i>868</i>	<i>43,517</i>
<i>Expenditure—</i>								
Pension Payments ..	5,690	6,992	4,213	455	1,114	626	320	19,410
Gratuities or Rewards ..	637	83	115	..	..	..	9	844
Refund of Contributions ..	1,357	548	232	66	102	28	80	2,413
Other ..	29	58	28	..	51	..	3	169
<i>Total ..</i>	<i>7,713</i>	<i>7,681</i>	<i>4,588</i>	<i>521</i>	<i>1,267</i>	<i>654</i>	<i>412</i>	<i>22,836</i>
<i>Funds at end of Year ..</i>	<i>59,133</i>	<i>62,411</i>	<i>40,155</i>	<i>6,873</i>	<i>11,293</i>	<i>4,260</i>	<i>3,516</i>	<i>187,641</i>
<i>Contributors at end of Year—</i>								
Males ..	No. 122,601	} 89,750	No. 46,735	No. 11,181	No. 11,512	No. 7,454	No. 5,850	} 323,828
Females ..	No. 14,468		No. 6,435	No. 4,072	No. 1,394	No. 567	No. 1,809	
<i>Total ..</i>	<i>137,069</i>	<i>89,750</i>	<i>53,170</i>	<i>15,253</i>	<i>12,906</i>	<i>8,021</i>	<i>7,659</i>	<i>323,828</i>
<i>Pensioners at end of Year—</i>								
Males ..	9,814	} 25,037	8,561	1,117	2,878	2,408	879	} 73,557
Female ex-employees ..	941		1,165	300	458	183	176	
Widows ..	6,242	6,215	298	2,322	1,386	513	..	
Children ..	1,439	637	49	260	165	114	..	
<i>Total ..</i>	<i>18,436</i>	<i>25,037</i>	<i>16,578</i>	<i>1,764</i>	<i>5,918</i>	<i>4,142</i>	<i>1,682</i>	<i>73,557</i>

For details of the individual funds summarized above see *Finance, Part I, Public and Private Finance*, Bulletin No. 48, issued by this Bureau.

**§ 2. Parliamentary Pension and Superannuation Schemes.**

Pension and superannuation schemes have been established for members of the Commonwealth and State Parliaments. Details of these schemes, except for Tasmania, are given in pages 91 to 99 of Official Year Book No. 38. Details of the Tasmanian scheme, are given on page 72 of Official Year Book No. 44. All the schemes are operated through funds to which the members of Parliament and the Commonwealth or States contribute. Details of the receipts, expenditure, funds and number of contributors and pensioners for the year 1956-57 are given in the following table:—

**PARLIAMENTARY PENSION AND SUPERANNUATION SCHEMES, 1956-57.**

Particulars.	C'wth.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£	£
<i>Receipts—</i>								
Contributions—								
Members ..	42,967	15,089	15,582	7,336	4,194	6,596	7,646	99,410
Government ..	19,528	10,147	17,796	7,336	7,694	6,240	..	68,741
Interest ..	8,905	3,015	..	9,974	3,134	1,777	301	27,106
Other ..	..	..	..	..	..	..	..	..
<i>Total ..</i>	<i>71,400</i>	<i>28,251</i>	<i>33,378</i>	<i>24,646</i>	<i>15,022</i>	<i>14,613</i>	<i>7,947</i>	<i>195,257</i>
<i>Expenditure—</i>								
Pension Payments (a) ..	27,654	15,681	33,378	3,224	5,588	6,823	1,538	93,886
Refund of Contributions ..	1,132	913	..	1,080	..	263	143	3,531
Other ..	..	..	..	..	75	..	137	212
<i>Total ..</i>	<i>28,786</i>	<i>16,594</i>	<i>33,378</i>	<i>4,304</i>	<i>5,663</i>	<i>7,086</i>	<i>1,818</i>	<i>97,629</i>
<i>Funds at end of Year ..</i>	<i>250,129</i>	<i>79,945</i>	..	<i>231,052</i>	<i>82,644</i>	<i>45,341</i>	<i>11,153</i>	<i>700,264</i>
<i>Contributors at end of Year</i>	No. 184	No. 97	No. 100	No. 71	No. 59	No. 80	No. 49	No. 640
<i>Pensioners at end of Year—</i>								
Ex-members ..	22	22	(b)	12	8	19	3	(b)
Widows ..	16	13	(b)	..	8	13	..	(b)
<i>Total ..</i>	<i>38</i>	<i>35</i>	<i>(b)</i>	<i>12</i>	<i>16</i>	<i>32</i>	<i>3</i>	<i>(b)</i>

(a) Including lump sum payments.

(b) Not available.

## CHAPTER XXI.

### PUBLIC FINANCE.

**NOTE.**—The subject of "Public Finance" is dealt with in this chapter under the two major divisions of Commonwealth Finance and State Finance. The close financial relations between the Commonwealth and States, however, particularly since the Financial Agreement has been in operation, demand also a combination of these two divisions under the heading of Commonwealth and State Finance. Under the Financial Agreement, the Commonwealth assumed the liability to bondholders for the States' Debts existing at the date of the Agreement and now arranges for all borrowings for and on behalf of the Commonwealth or any State and for all conversions, renewals, redemptions and consolidations of the Public Debts of the Commonwealth and the States. In view of this, it has been found convenient to deal with the Commonwealth and State Public Debt in a separate division.

The subject of income taxes is also dealt with in a separate division.

#### A. COMMONWEALTH FINANCE.

##### § 1. General.

**1. Financial Provisions of the Constitution.**—The main provisions of the Constitution relating to the initiation and development of the financial system of the Commonwealth are contained in Sections 81 to 105A of the Commonwealth Constitution (*see pp. 17-20 of this Year Book*). Two other sections which have a most important bearing on questions of Commonwealth finance are Sections 69 and 51.

Section 69 provides for the transfer from the States to the Commonwealth of certain specified departments, and Section 51, in outlining the powers of the Commonwealth Parliament, implies the transfer or creation of other departments. Section 87 deals with the financial relations between the Commonwealth and the States. These matters have been treated in previous issues of the Official Year Book and on pages 803-811 of this issue a summary is given of the present provisions for Commonwealth financial assistance to the States.

The majority of the tables relating to Commonwealth Finance have been compiled from the annual Budget Papers as presented to Parliament by the Treasurer of the Commonwealth.

**2. Accounts of the Commonwealth Government.**—The Commonwealth Government bases its accounts upon three funds, the Consolidated Revenue Fund, the Trust Fund and the Loan Fund.

##### § 2. Commonwealth Consolidated Revenue Fund.

###### I. Nature of Fund.

**1. Provisions of the Constitution.**—The provisions made for the establishment of a Commonwealth Consolidated Revenue Fund, and the means to be adopted for operating on the fund, are contained in Sections 81 to 83 of the Constitution (*see p. 17 of this Year Book*).

**2. Annual Results of Transactions.**—In the early 1920's, receipts and expenditure of the Consolidated Revenue Fund each ranged between £60 million and £70 million. After allowing for special appropriations amounting to one or two million pounds each year utilized for a variety of purposes, e.g., for debt redemption, naval construction, main roads, science and industry investigations, prospecting for oil and precious metals, civil aviation, etc., the receipts and expenditure of the Fund were balanced. In the later twenties and early thirties, when receipts and expenditure were each about £70 million or £80 million a year, there were annual deficits, which had accumulated to more than £17 million by the end of 1930-31.

In the years 1931–32 to 1938–39, receipts and expenditure ranged from £70 million to £95 million and were in balance after allowing for special appropriations of up to £3.5 million a year for reduction of the accumulated deficit, non-recurring grants to the States, post office works and the provision of defence equipment. The amount applied towards reduction of the accumulated deficit was approximately £1.5 million and the balance of the deficit (approximately £15.7 million) was funded in 1937–38.

For most of the 1939–45 War years and thereafter, the Consolidated Revenue Fund was balanced, all available revenue after charging expenditure on ordinary services being used for defence, war and repatriation purposes.

During the years 1953–54 to 1957–58, the Fund was balanced after special payments of £56.3 million and £70.1 million to the Debt Redemption Reserve Trust Account, and £61.6 million, £194.8 million and £104.4 million to the Loan Consolidation and Investment Reserve Trust Account. The amounts so transferred were subsequently invested wholly or partly in special loans for State works requirements.

Receipts and expenditure increased from £95 million in 1938–39 to £377 million in 1944–45. By 1950–51, they had risen to £842 million and by 1953–54 to £1,023 million. Receipts and expenditure for 1957–58 were £1,324 million.

## II.—Revenue.

1. General.—The following table shows details of the revenue from each source and the amount per head of population under each of the main headings during the years 1938–39 and 1953–54 to 1957–58. Taxation constitutes the main source of Commonwealth revenue, accounting for 87.7 per cent. in 1957–58.

### COMMONWEALTH CONSOLIDATED REVENUE FUND : SOURCES OF REVENUE. (£'000.)

Source.	1938–39.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
<i>Taxation</i> .. .. .	74,111	900,450	937,608	1,003,780	1,098,736	1,161,533
Per head of population ..	£10 13 9	£101 3 5	£103 2 11	£107 15 0	£115 4 8	£119 3 8
<i>Business Undertakings</i> ..	17,892	75,126	80,210	87,821	99,803	108,228
Per head of population ..	£2 11 9	£8 8 10	£8 16 6	£9 8 7	£10 9 4	£11 2 1
<i>Territories(a)</i> .. .. .	356	2,195	2,419	2,249	2,513	2,845
Per head of population ..	£0 1 0	£0 4 11	£0 5 4	£0 4 10	£0 5 3	£0 5 10
<i>Other Revenue</i> —						
Interest, etc. .. .. .	1,144	8,797	12,428	14,179	13,475	10,920
Coinage .. .. .	128	750	725	199	693	223
Defence .. .. .	151	2,809	4,106	3,820	3,763	5,776
Atomic Energy Commission	..	2,791	1,082	30	..	..
Civil Aviation—						
Recoups for Airmail Services						
Other .. .. .	6	3,437	3,767	(b)	(b)	(b)
Health .. .. .	18	80	86	1,159	1,262	1,472
Patents, Trade Marks, etc. . .	68	187	211	94	90	105
Bankruptcy .. .. .	31	49	54	267	306	318
Commerce and Agriculture				60	72	98
Shipping and Transport .. .	158	391	321	329	914	1,128
Net Profit on Australian Note Issue .. .. .	767	5,707	5,516	7,866	10,054	12,592
Surplus Balances of Trust Accounts .. .. .	..	4,190	8,237	1,981	69,782	3,991
Australian Shipping Board Transfer of Surplus Funds .. .. .	..	4,000	..	3,000	..	..
Joint Coal Board—Repayment of Advances .. .. .	..	3,342	3,550	2,488	750	1,100
Tea Importation Board—Repayment of Advance .. .. .	235	7,507	6,244	2,000	..	..
Other .. .. .	..	..	..	7,036	9,622	(c) 13,442
<i>Total</i> .. .. .	2,706	45,019	47,204	44,508	110,783	51,165
Per head of population ..	£0 7 9	£5 1 2	£5 3 10	£4 15 7	£11 12 5	£5 5 0
Grand Total .. .. .	95,065	1,022,790	1,067,441	1,138,358	1,311,835	1,323,771
Per head of population ..	£13 14 3	£114 18 4	£117 8 7	£122 4 0	£137 11 8	£135 16 7

(a) Excludes Railways. master-General's Department subsequently refunded.

(b) Transactions relating to Airmail Services now included in Post-

(c) Includes £1,314,000 collections of Diesel Fuel Taxation

A graphical representation of the revenue and expenditure of the Commonwealth Consolidated Revenue Fund appears on page 805.

2. Taxation.—(i) *Total Collections.* (a) *Amount.* Collections under each heading for the years 1938–39 and 1953–54 to 1957–58 are shown below :—

**COMMONWEALTH TAXATION : TOTAL NET COLLECTIONS.**  
(£'000.)

Heading.	1938–39.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
Customs .. .. .	31,161	94,757	101,254	87,508	68,597	71,717
Excise .. .. .	16,472	125,460	143,149	168,264	217,440	231,334
Sales Tax .. .. .	9,308	95,689	100,446	110,001	125,752	137,777
Land Tax .. .. .	1,489	221	13	..	1	11
Pay-roll Tax .. .. .	..	40,384	41,455	45,543	48,675	48,552
Income Taxes(a) .. .. .	11,883	528,181	532,916	573,988	620,298	650,419
Estate Duty .. .. .	1,915	9,825	9,614	10,120	12,712	13,774
Gift Duty .. .. .	..	1,386	1,618	1,820	1,940	2,205
Entertainments Tax .. .. .	..	1,977	—2	—1	..	..
Special Industry Taxes(b) .. .. .	1,883	2,570	7,145	6,537	3,321	5,744
<b>Total Taxation .. .. .</b>	<b>74,111</b>	<b>900,450</b>	<b>937,608</b>	<b>1,003,780</b>	<b>1,098,736</b>	<b>1,161,533</b>

(a) Includes Social Services Contribution, War-time (Company) Tax, Super Tax, Undistributed Profits Tax and Wool Deduction. (b) Used for purposes of industries concerned. The taxes are as follows:—Flour Tax, Wheat Tax, Wool Levy, Wool Contributory Charge, Wheat Export Charge, Miscellaneous Export Charges, Stevedoring Industry Charge, Tobacco Industry Charge and Gold Tax.

NOTE.—Minus sign (–) indicates an excess of refunds.

(b) *Proportion of each Class to Total Collections.* The following table shows the proportion of the total collections represented by returns from each class of taxation for the years 1938–39 and 1953–54 to 1957–58 :—

**COMMONWEALTH TAXATION : PROPORTION OF EACH CLASS TO TOTAL NET COLLECTIONS.**  
(Per Cent.)

Heading.	1938–39.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
Customs .. .. .	42.1	10.5	10.8	8.7	6.2	6.2
Excise .. .. .	22.3	13.9	15.3	16.8	19.8	19.9
Sales Tax .. .. .	12.6	10.6	10.7	11.0	11.4	11.8
Land Tax .. .. .	2.0	..	..	..	..	..
Pay-roll Tax .. .. .	..	4.5	4.4	4.5	4.4	4.2
Income Taxes(a) .. .. .	16.0	58.7	56.8	57.2	56.5	56.0
Estate Duty .. .. .	2.6	1.1	1.0	1.0	1.2	1.2
Gift Duty .. .. .	..	0.2	0.2	0.2	0.2	0.2
Entertainments Tax .. .. .	..	0.2	..	..	..	..
Special Industry Taxes(b) .. .. .	2.4	0.3	0.8	0.6	0.3	0.5
<b>Total Taxation .. .. .</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) See note (a) to previous table.

(b) See note (b) to previous table.

(ii) *Customs Revenue.* The classification of customs receipts by Tariff Divisions published in earlier issues of the Official Year Book was discontinued in 1955–56. In the following tables, customs duty receipts have been dissected according to the classification used for oversea trade statistics. For years prior to 1955–56, refunds and drawbacks were not classified by statistical classes and consequently details of gross receipts only are available for those years. The following table shows gross receipts for the years 1938–39 and 1953–54 to 1957–58 according to statistical classes.

## COMMONWEALTH CUSTOMS REVENUE : CLASSIFICATION OF GROSS RECEIPTS.

(£'000.)

Classes.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Foodstuffs of animal origin .. .. .	266	267	371	432	294	359
Foodstuffs of vegetable origin .. .. .	1,069	1,405	1,558	1,346	1,445	1,611
Spirituos and alcoholic liquors .. .. .	1,105	2,256	2,621	2,712	2,701	3,049
Tobacco, cigars and cigarettes .. .. .	4,097	18,902	15,839	12,546	12,538	12,383
Animal substances (not foodstuffs) .. .. .	17	7	7	18	9	7
Vegetable substances and fibres .. .. .	74	384	209	256	263	252
Yarns, textiles and apparel .. .. .	3,057	11,589	13,614	12,200	8,479	10,537
Oils, fats and waxes .. .. .	9,956	27,168	23,137	19,336	12,131	10,518
Pigments, paints and varnishes .. .. .	38	170	138	145	172	178
Rocks and minerals .. .. .	40	31	45	34	30	48
Metals, metal manufactures and machinery .. .. .	4,830	18,275	26,356	23,202	20,607	22,569
Rubber and leather and manufactures thereof .. .. .	431	1,179	1,495	1,410	1,058	1,462
Wood and wicker, raw and manufactured .. .. .	780	814	1,568	1,569	1,434	1,539
Earthenware, cement, china, glass and stoneware .. .. .	493	1,713	2,207	2,309	1,656	1,873
Pulp, paper and board, paper manufactures and stationery .. .. .	491	896	1,452	1,246	874	980
Sporting material, toys, fancy goods, jewellery and time pieces .. .. .	390	2,039	2,912	2,822	1,804	2,186
Optical, surgical and scientific instruments, photographic goods .. .. .	239	944	1,155	1,242	1,104	1,153
Chemicals, pharmaceutical products, essential oils and fertilizers .. .. .	377	911	1,228	1,227	1,177	1,444
Miscellaneous goods .. .. .	652	913	2,140	2,532	2,045	2,359
Primage .. .. .	4,109	8,636	8,681	7,734	4,670	2,740
Other receipts .. .. .	132	822	586	608	563	562
<i>Total—Gross Customs Revenue</i> .. .. .	<i>32,643</i>	<i>99,321</i>	<i>107,319</i>	<i>94,926</i>	<i>75,054</i>	<i>77,809</i>
Refunds and drawbacks .. .. .	1,482	4,564	6,065	7,418	6,457	6,092
<i>Total—Net Customs Revenue</i> .. .. .	<i>31,161</i>	<i>94,757</i>	<i>101,254</i>	<i>87,508</i>	<i>68,597</i>	<i>71,717</i>

The following table gives details of net customs receipts for the years 1955-56 to 1957-58 :—

## COMMONWEALTH CUSTOMS REVENUE : CLASSIFICATION OF NET RECEIPTS.

(£'000.)

Classes.	1955-56.	1956-57.	1957-58.
Foodstuffs of animal origin .. .. .	418	281	347
Foodstuffs of vegetable origin .. .. .	1,305	1,392	1,546
Spirituos and alcoholic liquors .. .. .	2,711	2,697	3,047
Tobacco, cigars and cigarettes .. .. .	12,516	12,526	12,375
Animal substances (not foodstuffs) .. .. .	3	7	5
Vegetable substances and fibres .. .. .	240	196	222
Yarns, textiles and apparel .. .. .	11,660	8,303	10,284
Oils, fats and waxes .. .. .	18,933	11,543	10,039
Pigments, paints and varnishes .. .. .	105	152	160
Rocks and minerals .. .. .	1	24	35
Metals, metal manufactures and machinery .. .. .	18,149	16,169	18,389
Rubber and leather and manufactures thereof .. .. .	1,294	990	1,291
Wood and wicker, raw and manufactured .. .. .	1,533	1,413	1,510
Earthenware, cement, china, glass and stoneware .. .. .	2,235	1,588	1,822
Pulp, paper and board, paper manufactures and stationery .. .. .	1,166	748	848
Sporting material, toys, fancy goods, jewellery and timepieces .. .. .	2,792	1,779	2,165
Optical, surgical and scientific instruments, photographic goods .. .. .	1,204	1,065	1,118
Chemicals, pharmaceutical products, essential oils and fertilizers .. .. .	1,093	1,051	1,302
Miscellaneous goods .. .. .	2,288	1,802	2,174
Primage .. .. .	7,261	4,318	2,483
Other receipts .. .. .	601	553	555
<i>Total</i> .. .. .	<i>87,508</i>	<i>68,597</i>	<i>71,717</i>

(iii) *Excise Revenue.* Net excise receipts for the years 1938-39 and 1953-54 to 1957-58 were as follows :—

**COMMONWEALTH EXCISE REVENUE : CLASSIFICATION OF NET RECEIPTS.**  
(£'000.)

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Beer .. .. .	7,289	71,060	76,362	85,315	103,516	105,997
Spirits .. .. .	1,604	6,355	6,496	7,325	8,138	8,047
Tobacco .. .. .	3,868	16,211	15,141	14,849	17,270	16,633
Cigars and cigarettes	2,419	23,081	29,030	36,516	47,916	51,366
Cigarette papers .. .. .	531	1,072	1,007	896	910	862
Petrol .. .. .	582	5,549	12,898	21,190	37,183	41,711
Diesel Fuel .. .. .						(a) 2,770
Matches .. .. .	82	1,083	1,096	1,061	1,074	1,084
Playing cards .. .. .		53	51	47	48	47
Coal .. .. .		579	600	566	599	590
Miscellaneous .. .. .	86	417	468	499	786	2,227
<b>Total .. .. .</b>	<b>16,472</b>	<b>125,460</b>	<b>143,149</b>	<b>168,264</b>	<b>217,440</b>	<b>231,334</b>

(a) Refunds of Diesel Fuel Taxation £1,314,000 have been deducted.

(iv) *Other Taxation.* (a) *General.* Taxes other than customs and excise and the various export charges are, in general, assessed and collected by the Commissioner of Taxation. The organization comprises a Head Office in Canberra, an office in each State assessing the returns of taxpayers whose interests are restricted to that State only, and a Central Office assessing taxpayers whose interests are in more than one State.

(b) *Sales Tax.* The sales tax was first imposed in August, 1930. The operation of the tax is controlled chiefly by a system of registration of taxpayers whereby all manufacturers and wholesale merchants, who are the taxpayers under the Act in respect of goods sold in Australia, must be registered with the Department. The tax on imports subject to sales tax is collected by the Customs Department at ports of entry.

Since the inception of the tax, certain exemptions have been allowed. These exemptions, which have been extended from time to time, relate mainly to goods of an essential nature or those for use in primary production. The most recent exemptions were those granted from 4th September, 1957.

A general rate of tax is levied on all goods other than those specified in the schedules to the Sales Tax (Exemptions and Classifications) Act 1935-1957. These schedules set out details of goods exempt from sales tax and those subject to special rates. The general and special rates which operated from 8th September, 1949, were:—

Period.	General Rate.	Special Rates.
8th September, 1949 to 12th October, 1950 ..	8½ per cent. ..	25 per cent.
13th October, 1950 to 26th September, 1951 ..	8½ per cent. ..	10, 25 and 33½ per cent.
27th September, 1951 to 6th August, 1952 ..	12½ per cent. ..	20, 25, 33½, 50 and 66½ per cent.
7th August, 1952 to 9th September, 1953 ..	12½ per cent. ..	20, 33½ and 50 per cent.
10th September, 1953 to 18th August, 1954 ..	12½ per cent. ..	16½ per cent.
19th August, 1954 to 14th March, 1956 ..	12½ per cent. ..	10 and 16½ per cent.
15th March, 1956 to 3rd September, 1957 ..	12½ per cent. ..	10, 16½, 25 and 30 per cent.
From 4th September, 1957 .. .. .	12½ per cent. ..	8½, 16½, 25 and 30 per cent.

For particulars of rates applicable from the inception of Sales Tax in August, 1930, to 7th September, 1949, see Official Year Book No. 37, page 617.

Particulars of the net amount of sales tax payable, and the sales of taxable and exempt goods in each State for 1957-58, are given in the following table. The figures relate to sales during the period 1st July to 30th June. The figures for sales tax payable differ from those for net collections shown on page 785 because the latter include some adjustments in respect of earlier tax years and include only tax payable on returns lodged during the year, which in general cover sales for the period June to May.

## SALES TAX AND AMOUNT OF SALES, 1957-58.

(£'000.)

Particulars.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	Aust- ralia.
Net Sales on which Sales Tax was payable at—								
8½ per cent.(b) ..	52,841	44,184	14,629	13,149	7,778	2,648	22	135,251
10 per cent.(c) ..	10,146	8,662	3,036	2,546	1,501	498	6	26,395
12½ per cent. ..	151,850	101,458	45,025	31,331	20,202	8,566	273	358,705
16½ per cent. ..	38,505	35,447	17,737	10,646	8,125	1,136	40	111,636
25 per cent. ..	42,650	29,268	6,062	4,615	2,638	817	14	86,064
30 per cent. ..	45,282	45,834	17,899	13,242	8,070	961	8	131,296
Total ..	341,274	264,853	104,388	75,529	48,314	14,626	363	849,347
Sales of Exempt Goods by Registered Persons	827,239	633,268	275,171	175,813	133,552	58,286	2,359	2,105,688
Total Sales of Taxable and Exempt Goods ..	1,168,513	898,121	379,559	251,342	181,866	72,912	2,722	2,955,035
Sales Tax Payable ..	55,064	44,206	16,992	12,167	7,758	2,023	49	138,259

(a) Includes the Australian Capital Territory. (b) Operative from 4th September, 1957.  
(c) Ceased to operate on 3rd September, 1957.

Sales of taxable and exempt goods and sales tax payable for Australia as a whole are shown in the following table for the years 1938-39 and 1953-54 to 1957-58:—

## SALES TAX AND AMOUNT OF SALES.

(£'000.)

Year.	Net Sales on which Sales Tax was Payable.	Sales of Exempt Goods by Registered Persons.	Total Sales of Taxable and Exempt Goods.	Sales Tax Payable.
1938-39 .. .. .	196,491	280,656	477,147	9,363
1953-54 .. .. .	687,946	1,466,323	2,154,269	96,079
1954-55 .. .. .	766,940	1,699,342	2,466,282	101,427
1955-56 .. .. .	798,774	1,856,865	2,655,639	111,469
1956-57 .. .. .	781,250	2,016,828	2,798,078	127,649
1957-58 .. .. .	849,347	2,105,688	2,955,035	138,259

In the foregoing tables, sales include goods transferred to stock for sale by retail, goods imported by persons other than registered taxpayers, and goods used in the business of the taxpayer. Exempt sales relate to goods exempted from sales tax under the Sales Tax (Exemptions and Classifications) Act 1935-1957. The figures shown in the foregoing tables do not represent the total sales of all commodities, as vendors trading in exempt goods only are not required to be registered and consequently the volume of their sales is not included in the statistics above. In addition, non-taxable sales (i.e. goods sold by one registered taxpayer to another registered taxpayer) are excluded.

(c) *Land Tax.* Commonwealth Land Tax was levied annually from 1910-11 to 1951-52 on the unimproved value of land. It was abolished from 1st July, 1952. For rates of tax payable from 1942-43 to 1951-52, see Official Year Book No. 40, 1954, page 669. Receipts for the years 1938-39 and 1953-54 to 1957-58 were as follows:—1938-39, £1,489,000; 1953-54, £221,000; 1954-55, £13,000; 1955-56, £356; 1956-57, £1,074; 1957-58, £11,243.

(d) *Pay-roll Tax.* The Pay-roll Tax Act 1941 and the Pay-roll Tax Assessment Act 1941-1942 imposed a pay-roll tax of 2½ per cent. on all wages and salaries in excess of £20 a week paid by an employer after 30th June, 1941. Employers who are liable for tax are required to register and to furnish a monthly return of all wages paid. These measures formed part of the Commonwealth scheme of child endowment, the revenue from the tax

being designed to provide part of the money required. The exemption was increased to £80 a week (£4,160 per annum) from 1st October, 1953, to £120 a week (£6,240 per annum) from 1st September, 1954, and to £200 a week (£10,400 per annum) from 1st September, 1957.

Receipts from pay-roll tax for the years 1953-54 to 1957-58 were, 1953-54, £40,384,000; 1954-55, £41,455,000; 1955-56, £45,543,000; 1956-57, £48,675,000; 1957-58, £48,552,000.

(e) *Income Taxes.* Details of taxes on income are given in division E of this Chapter

(f) *Wool Sales Deduction.* The Wool Sales Deduction Act 1950 and the Wool Sales Deduction (Administration) Act 1950 came into operation on 2nd December, 1950, and required that a deduction be made from the sale value of wool sold or exported, the amount deducted being set off against the Income Tax and Social Services Contribution assessed in respect of the income of the year 1950-51. These Acts were repealed by the Wool Sales Deduction Legislation Repeal Act 1951 which came into operation on 17th November, 1951, and provided for the refund to producers, etc., of amounts paid on the value of wool sold or otherwise disposed of after 30th June, 1951. The amount of deduction collected in 1951-52 was £5,963,000. In 1952-53 and 1953-54, refunds amounted to £2,223,000 and £239,000 respectively.

(g) *Estate Duty.* The Commonwealth Estate Duty was first levied in 1914. Particulars of exemptions allowed and the rates imposed prior to November, 1957, are given in earlier issues of the Year Book (*see* No. 43, p. 758).

Under the Estate Duty Assessment Act 1914-1957, Estate Duty is assessed on the net value of the estate less a statutory exemption determined in accordance with the following formula:—(a) where the whole of the estate passes to the widow, children (including adopted children, step-children and ex-nuptial children), or grand-children of the deceased, the sum of £5,000 decreasing by £1 for every £3 by which the value exceeds £5,000 and ceasing to apply at £20,000; (b) where no part of the estate passes to the widow, children or grand-children, the sum of £2,500 decreasing by £1 for every £3 by which the value exceeds £2,500 and ceasing to apply at £10,000; and (c) where part only of the estate passes to the widow, children or grand-children, the statutory exemption is to be calculated proportionately under (a) and (b).

An amendment to this Act, assented to on 20th November, 1957, provided for rebates of duty on estates which become liable for duty on two or more occasions within a period of five years.

The rates of duty levied under the Estate Duty Act 1914-1941 increase as the value of the estate increases as follows:—£1 to £10,000, 3 per cent.; £10,001 to £20,000, 3 per cent. to 6 per cent.; £20,001 to £120,000, 6 per cent. to 26 per cent.; £120,001 to £500,000, 26 per cent. to 27.9 per cent.; over £500,000, 27.9 per cent.

Total collections for the years 1938-39 and 1953-54 to 1957-58 were as follows:—1938-39, £1,915,000; 1953-54, £9,825,000; 1954-55, £9,614,000; 1955-56, £10,120,000; 1956-57, £12,712,000; 1957-58, £13,774,000.

Particulars of the number and value of estates and duty assessed, for each of the assessment years 1938-39 and 1952-53 to 1956-57, are given in the following table:—

#### ESTATE DUTY ASSESSMENTS.

Particulars.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number of Estates . . . . .	9,681	19,663	19,621	12,878	11,069	12,784
Gross Value Assessed . . . . .	£'000 65,699	175,672	187,905	176,853	178,361	213,253
Deductions . . . . .	£'000 12,630	27,795	31,010	30,136	31,281	37,376
Statutory Exemption . . . . .	£'000 . . . . .	22,566	22,976	23,290	23,802	28,661
Dutiable Value . . . . .	£'000 53,069	125,311	133,919	123,427	123,278	147,216
Duty Payable . . . . .	£'000 2,002	9,249	10,089	10,310	10,882	13,580
Average dutiable value . . . . .	£ 5,482	6,373	6,825	9,584	11,137	11,516
Average duty per estate . . . . .	£ 207	470	514	801	983	1,062

(h) *Gift Duty.* The Gift Duty Act 1941–1947 and the Gift Duty Assessment Act 1941–1957 impose a gift duty on all gifts made after the 29th October, 1941. A gift has been defined as any disposition of property which is made otherwise than by will without adequate consideration in money or money's worth. There is a liability on both the donor and the donee to furnish a return, and both are jointly and severally liable for payment of the duty.

The following rates of duty are levied under the Gift Duty Act 1941–1947 and relate to the value of all gifts made by the donor within a period of eighteen months :—Not exceeding £2,000, nil ; £2,001 to £10,000, 3 per cent. ; £10,001 to £20,000, 3 per cent. to 6 per cent. ; £20,001 to £120,000, 6 per cent. to 26 per cent. ; £120,001 to £500,000, 26 per cent. to 27.9 per cent. ; £500,001 and over, 27.9 per cent.

An amendment which operated from 3rd June, 1947, provides that gift duty will not exceed one-half of the amount by which the value of the gift exceeds £2,000.

Total receipts from gift duty for the years 1953–54 to 1957–58 were as follows :—1953–54, £1,386,000; 1954–55, £1,618,000; 1955–56, £1,820,000; 1956–57, £1,940,000; 1957–58, £2,205,000.

(i) *Entertainments Tax.* The Commonwealth levied an Entertainments Tax from 1st October, 1942, to 30th September, 1953. Details of rates are given in earlier issues of the Official Year Book (see No. 40, pp. 672 and 673).

Entertainments tax receipts during 1953–54 were £1,977,000. There was an excess of refunds over payments of £2,000 in 1954–55 and of £1,000 in 1955–56. Receipts in 1956–57 and 1957–58 were £156 and £124.

(j) *Flour Tax.* Particulars of the rates of flour tax which operated from 4th December, 1933, to 21st December, 1947, are given in Official Year Book No. 37, pages 618 and 619. Because of the rise in wheat prices, the rate was declared to be nil as from 22nd December, 1947.

(k) *Wool Levy.* The Wool Tax Act 1936 and Wool Tax Assessment Act 1936 provided for a levy on all wool grown in Australia and shorn on or after 1st July, 1936. Details of this levy are given in earlier issues of the Official Year Book. This levy was suspended from 1st July, 1946, until 30th June, 1952, while the Wool Contributory Charge was imposed.

With the repeal of the Wool Contributory Charge, however, a levy on wool produced in Australia was re-introduced from 1st July, 1952. The Wool Tax Acts (Nos. 1 and 2) of 1952 provided for the payment of a levy of four shillings a bale until 30th June, 1953, after which date the rate of tax could be varied within prescribed limits. There was no variation until 1st July, 1957, when the rate was increased to six shillings a bale. The purpose of the tax is to provide funds for publicity and research previously provided by the Wool Contributory Charge. Collections during 1954–55, 1955–56, 1956–57 and 1957–58 were £784,000, £851,000, £979,000 and £1,328,000 respectively.

(l) *Wool Contributory Charge.* The Wool (Contributory Charge) Act 1945 and the Wool (Contributory Charge) Assessment Act 1945 imposed a charge on all wool produced in Australia and sold, manufactured or exported. Wool sold by the Australian Wool Realization Commission was not liable to the charge. Details of the rate of the charge and collections made were given in earlier issues of the Official Year Book (see No. 40, p. 675).

The various Wool (Contributory Charge) Acts were repealed by the Wool Tax Assessment Act of 1952 and the charge superseded by the wool levy.

(m) *Wheat Export Charge and Wheat Tax.* A summary of the provisions of the Wheat Export Charge Acts 1946, 1948 and 1952 is contained in previous issues of the Official Year Book (see No. 40, p. 676 and No. 41, p. 604).

The Wheat Export Charge Act 1954 repealed previous Acts and provided for an export charge on wheat and wheat products for the seasons 1953–54 to 1957–58 inclusive. The charge levied is based on the difference between the cost of production and the export price with a maximum levy of 1s. 6d. a bushel. Under the Wheat Industry Stabilization Act 1954, to which the Wheat Export Charge Act is complementary, the Commonwealth Government guarantees a return to wheat-growers of the ascertained cost of production in respect of up to 100 million bushels of wheat exported from Australia during each of the five seasons. Collections from the wheat export charge are paid into the Wheat Prices Stabilization Fund, out of which payments will be made to the Australian Wheat Board, when required, for the purpose of building up the average export price for any season to the guaranteed price. If the fund is exhausted, additional payments will be made from the Consolidated Revenue Fund.

Collections of the wheat export charge amounted to nil in 1953-54, £5,063,000 in 1954-55, £4,294,000 in 1955-56, nil in 1956-57 and £443,000 in 1957-58.

The Wheat Tax Act of 1957 imposed a tax of  $\frac{1}{4}$ d. for each bushel of wheat—

- (a) which has been delivered to the Wheat Board on or after the first day of October, 1956, and before the date of commencement of the Act; or
- (b) which is delivered to the Wheat Board on or after that date.

The Act also provided that where, before the commencement of the Act, a person delivering to the Board wheat upon which tax is imposed by the Act authorized the Board to deduct an amount from the moneys payable to him and to pay the amount so deducted to a person, authority or association for the purposes of soil fertility research or other research likely to benefit the wheat industry and the Board did so, the tax otherwise payable upon that wheat is to be reduced by the amount so deducted.

The Wheat Research Act of 1957 provided for the establishment of a Wheat Research Trust Account to receive moneys payable under the Wheat Tax Act 1957 and for the setting up of a Wheat Industry Research Council to direct the expenditure of moneys from that Trust Account for research, etc., to benefit the Wheat Industry.

Collections of Wheat Tax in 1957-58 amounted to £185,000, which was paid to the Wheat Research Trust Account.

(n) *Miscellaneous Export Charges.* These consist of charges levied on exports of apples and pears (Apple and Pear Export Charges Act 1938-1947), canned fruits (Canned Fruits Export Charges Act 1926-1952), dairy produce (Dairy Produce Export Charges Act 1924-1937), dried fruits (Dried Fruits Export Charges Act 1924-1929), eggs (Egg Export Charges Act 1947) and meat (Meat Export Charge Act 1935-54) and on grapes used in the manufacture of wine (Wine Grapes Charges Act 1929-1954). The collections are paid into funds to be applied for the purposes of Export Boards established under various Acts, in controlling the quantity and quality of produce exported.

Collections for the last five years were as follows:—1953-54, £168,000; 1954-55, £300,000; 1955-56, £414,000; 1956-57, £371,000; and 1957-58, £390,000.

(o) *Stevedoring Industry Charge.* The Stevedoring Industry Charge Act 1947 and the Stevedoring Industry Charge Assessment Act 1947 imposed a charge of  $4\frac{1}{4}$ d. a man-hour on the employer of a waterside worker after 22nd December, 1947.

The amounts received are paid to the Stevedoring Industry Board for the payment of attendance money to waterside workers and for other expenses of the Board.

Since 1947, the charge has been amended as follows:—11th October, 1949, a reduction to  $2\frac{1}{4}$ d. a man-hour; 11th December, 1951, an increase to 4d. a man-hour; 28th October, 1952, an increase to 11d. a man-hour; 4th May, 1954, a reduction to 6d. a man-hour; 30th October, 1956, an increase to 1s. 7d. a man-hour; and from 21st May, 1957, an increase to 2s. a man-hour.

A further amendment under the Stevedoring Industry Charge Act 1958 which came into operation on 1st April, 1958, provided for an increase of the charge to 3s. a man-hour until 1st July, 1959, and a reduction to 2s. 6d. a man-hour on or after 1st July, 1959.

Collections during the years 1953-54 to 1957-58 were as follows:—1953-54, £1,630,000; 1954-55, £998,000; 1955-56, £973,000; 1956-57, £1,926,000; and 1957-58, £3,337,000.

(p) *Gold Tax.* Particulars of the Gold Tax which operated from 15th September, 1939, to 20th September, 1947, are given in Official Year Book No. 39, page 767.

(q) *Tobacco Industry Charge.* The Tobacco Charge Acts Nos. 1, 2 and 3, 1955 and the Tobacco Charges Assessment Act 1955, which came into operation on 1st January, 1956, provided for charges on tobacco leaf grown in Australia.

The Tobacco Charge Act No. 1, 1955 imposed a maximum charge of  $\frac{1}{4}$ d. a pound on all Australian tobacco leaf sold to a manufacturer.

The Tobacco Charge Act No. 2, 1955 imposed a charge at twice the rate to be levied under the Tobacco Charge Act No. 1, on all Australian tobacco leaf purchased by a manufacturer.

The Tobacco Charge Act No. 3, 1955, imposed a charge on all Australian tobacco leaf grown by a manufacturer and appropriated by him for manufacturing purposes. Where the manufacturer grew, in Australia, not less than nine-tenths of the tobacco leaf used by him in manufacturing, the charge was at the rate imposed by the Tobacco Charge Act No. 1. In other cases, the charge was at twice that rate.

The charges collected under the Tobacco Charges Assessment Act 1955 were paid into the Tobacco Industry Trust Account which was established by the Tobacco Industry Act, 1955. Moneys in this account are used for the promotion of the tobacco industry.

Collections in 1955-56, 1956-57 and 1957-58 amounted to £5,000, £41,000 and £61,000 respectively.

3. *Business Undertakings.*—(i) *Postmaster-General's Department.* Particulars of net receipts for each of the financial years 1938-39 and 1953-54 to 1957-58 are given in the following table:—

**POSTMASTER-GENERAL'S DEPARTMENT : NET RECEIPTS.**  
(£'000.)

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Private boxes and bags .. .. .	74	175	180	185	240	247
Commission on money orders and postal notes .. .. .	289	887	862	935	926	932
Telegraphs .. .. .	1,372	4,710	4,934	4,960	5,904	6,169
Telephones .. .. .	8,040	37,113	40,402	44,351	51,002	55,344
Postage .. .. .	6,636	22,893	24,139	(a) 26,597	(a) 29,464	(a) 31,339
Miscellaneous .. .. .	955	2,020	2,308	2,313	2,538	2,745
<b>Total .. .. .</b>	<b>17,366</b>	<b>67,798</b>	<b>72,825</b>	<b>79,341</b>	<b>90,074</b>	<b>96,776</b>

(a) Includes revenue for Airmail Services previously received by Department of Civil Aviation.

Further particulars of the Postmaster-General's Department's receipts to 1957-58 are given in Chapter XIV.—Transport and Communication (Part II, Division A. Posts; Telegraphs; Telephones; Cable and Radio Communication).

(ii) *Broadcasting Services.* Following the amendment of the Australian Broadcasting Act 1942-1946 by Act No. 64 of 1948, the Broadcasting Control Board was set up on 15th March, 1949. (See also Chapter XIV.—Transport and Communication).

Details of net receipts for the years 1953-54 to 1957-58 are shown in the following table:—

**BROADCASTING SERVICES : NET RECEIPTS.**  
(£'000.)

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Listeners' Licence Fees .. .. .	3,827	3,831	3,846	4,866	5,371
Broadcasting Station Licence Fees .. .. .	25	27	35	66	80
Television Viewers' Licence Fees .. .. .	..	..	..	344	1,389
Television Station Licence Fees .. .. .	..	..	..	..	7
Miscellaneous .. .. .	15	17	16	25	29
<b>Total .. .. .</b>	<b>3,867</b>	<b>3,875</b>	<b>3,897</b>	<b>5,301</b>	<b>6,876</b>

(iii) *Commonwealth Railways.* The Commonwealth Government is responsible for four railways—the Trans-Australian, the Central Australia, the North Australia and the Australian Capital Territory. The following table shows the amounts paid to the credit of the Consolidated Revenue Fund on account of each of these railways for the years 1938-39 and 1953-54 to 1957-58:—

**COMMONWEALTH RAILWAY REVENUE.**  
(£'000.)

Railway.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Trans-Australian .. .. .	331	1,825	1,928	2,545	2,887	2,821
Central Australia .. .. .	138	1,553	1,483	1,937	1,390	1,554
North Australia .. .. .	50	68	70	86	130	182
Aust. Cap. Territory .. .. .	7	15	29	15	21	19
<b>Total .. .. .</b>	<b>526</b>	<b>3,461</b>	<b>3,510</b>	<b>4,583</b>	<b>4,428</b>	<b>4,576</b>

Further particulars to 1957-58 are given in Chapter XIV.—Transport and Communication (Part I. Division B. Government Railways).

4. Other Sources of Revenue.—Revenue derived by the Consolidated Revenue Fund from the Territories of the Commonwealth during 1956-57 and 1957-58 amounted to £2,513,000 and £2,845,000 respectively (Australian Capital Territory, £1,604,000 and £1,711,000; Northern Territory, £907,000 and £1,115,000; Cocos (Keeling) Islands, £2,000 and £19,000). Of other sources of revenue, amounting in 1956-57 and 1957-58 to £110,783,000 and £51,165,000 respectively, the following are noteworthy:—Interest, £13,475,000, £10,920,000; Defence, £3,763,000, £5,776,000; Net Profit on Australian Note Issue, £10,054,000, £12,592,000; Joint Coal Board—Repayment of Advances, £750,000, £1,100,000; and Surplus Balances of Trust Accounts, £69,782,000, £3,991,000.

### III.—Expenditure.

1. Details of Expenditure from Consolidated Revenue.—The following table shows details of expenditure from the Consolidated Revenue Fund during the years 1938-39 and 1953-54 to 1957-58.

#### COMMONWEALTH CONSOLIDATED REVENUE FUND: EXPENDITURE. (£'000.)

Department, etc.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Defence Services(a) .. ..	7,506	161,647	153,187	152,929	151,274	151,535
War (1914-18 and 1939-45) and Repatriation Services(b) ..	19,242	120,114	120,120	124,487	112,296	127,924
Subsidies and Bounties .. ..	236	21,320	21,539	17,393	15,014	15,660
Cost of Departments(c) .. ..	9,237	71,890	78,799	87,913	96,775	106,613
National Welfare Fund .. ..	(d) 16,428	176,565	189,319	214,866	223,923	247,485
Debt Redemption Reserve Trust Account .. ..	..	56,271	70,151	..	..	..
Loan Consolidation and Investment Reserve Trust Account .. ..	..	..	..	61,613	194,793	104,378
Business Undertakings— Postmaster-General— Airmail Services .. ..	211	2,863	2,946	3,860	4,305	4,537
Other .. ..	14,667	69,381	73,300	81,767	86,892	92,415
Broadcasting Services .. ..	(e) ..	4,684	4,871	5,590	6,701	7,334
Railways .. ..	1,331	3,527	3,622	3,721	4,244	4,321
Territories .. ..	1,100	11,153	12,971	14,603	16,510	19,288
Capital Works and Services— Defence .. ..	1,349	28,513	33,003	38,479	38,416	34,760
Repatriation .. ..	141	27,073	30,131	30,242	30,167	35,206
Postmaster-General .. ..	3,851	25,986	25,839	28,970	30,721	34,811
Broadcasting Services .. ..	(e) ..	281	273	817	2,697	1,583
Railways .. ..	142	3,382	3,100	2,674	3,422	2,545
Territories .. ..	739	4,511	5,168	8,049	8,027	11,749
Other(f) .. ..	493	30,948	29,032	30,865	32,488	36,868
Payments to or for States(g) ..	15,749	195,990	200,937	220,907	244,610	271,351
Other Expenditure(h) .. ..	2,643	6,691	9,133	8,613	8,560	13,408
Grand Total .. ..	95,065	1,022,790	1,067,441	1,138,358	1,311,835	1,323,771
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Per Head of Population .. ..	13 14 3	114 18 4	117 8 7	122 4 0	137 11 8	135 16 7

(a) Excludes debt charges, Audit charges, Pension and Superannuation payments and Defence Division of the Department of the Treasury. (b) Excludes Audit charges and Government contributions under Superannuation Act. (c) Revised to include Audit charges relating to Defence and War and Repatriation Services and to exclude payments to the States for Cattle Tick Control, Dairy Industry Extension, Agricultural Advisory Services and Tobacco Industry Assistance. (d) Invalid and Age Pensions and Maternity Allowances. (e) Provided in part from Postmaster-General's Department votes and balance from Broadcasting Trust Account. (f) Excludes expenditure from Capital Works votes on Grants for Railway Standardization included as payments to the States. (g) Revised to include payments to States from Departmental votes. See footnotes (c) and (f). (h) Includes assistance to Primary Producers.

Further details of the expenditure in each section are given in paragraphs 2 to 14 following.

A graphical representation of the revenue and expenditure of the Commonwealth Consolidated Revenue Fund appears on page 805. In this diagram, Public Debt Charges (interest and debt redemption, etc.) are shown as a separate item, whereas, in the table above, these charges are included in the section to which they relate.

Details of Commonwealth expenditure on public debt charges for 1938–39 and 1953–54 to 1957–58 are shown in the following table :—

**PUBLIC DEBT CHARGES(a) : COMMONWEALTH EXPENDITURE.**  
(£'000.)

Item.	1938–39.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
<i>War (1914–18 and 1939–45)</i>						
<i>Debt(b)—</i>						
Interest and Exchange ..	7,616	43,698	43,234	43,514	42,695	39,545
Debt Redemption ..	2,049	19,981	15,273	16,299	15,829	12,337
Other(c) ..	224	249	376	214	279	163
<i>Total .. ..</i>	<i>9,889</i>	<i>63,928</i>	<i>58,883</i>	<i>60,027</i>	<i>58,803</i>	<i>52,045</i>
<i>Business Undertakings—</i>						
<i>Postmaster-General's Department—</i>						
Interest and Exchange ..	1,758	1,207	1,303	885	862	833
Debt Redemption ..	1,129	2,313	1,655	1,438	1,172	979
Other(c) ..	..	13	253	..	..	..
<i>Total .. ..</i>	<i>2,887</i>	<i>3,533</i>	<i>3,211</i>	<i>2,323</i>	<i>2,034</i>	<i>1,812</i>
<i>Railways—</i>						
Interest and Exchange ..	455	406	410	388	385	390
Debt Redemption ..	75	155	163	172	180	189
Other(c) ..	11	..	19	..	..	..
<i>Total .. ..</i>	<i>541</i>	<i>561</i>	<i>592</i>	<i>560</i>	<i>565</i>	<i>579</i>
<i>Territories—</i>						
Interest and Exchange ..	318	238	234	233	228	227
Debt Redemption ..	58	121	127	133	140	147
Other(c) ..	4	..	..	..	..	..
<i>Total .. ..</i>	<i>380</i>	<i>359</i>	<i>361</i>	<i>366</i>	<i>368</i>	<i>374</i>
<i>Works and Other Purposes—</i>						
Interest and Exchange ..	3,226	5,308	6,089	8,175	9,228	10,928
Debt Redemption ..	613	708	556	625	599	620
Other(c) ..	37	133	145	77	553	190
<i>Total .. ..</i>	<i>3,876</i>	<i>6,149</i>	<i>6,790</i>	<i>8,877</i>	<i>10,380</i>	<i>11,738</i>
<i>Total—</i>						
Interest and Exchange ..	13,373	50,857	51,270	53,195	53,398	51,923
Debt Redemption ..	3,924	23,278	17,774	18,667	17,920	14,272
Other(c) ..	276	395	793	291	832	353
<i>Grand Total .. ..</i>	<i>17,573</i>	<i>74,530</i>	<i>69,837</i>	<i>72,153</i>	<i>72,150</i>	<i>66,548</i>

(a) Excludes payments to or for the States under the Financial Agreement. See pages 803–809.  
(b) Includes repatriation debt. (c) Redemption, conversion and loan management, etc., expenses.

2. Defence Services.—Details of the expenditure on defence services by the Departments of Defence, Navy, Army, Air, Supply and Defence Production are shown in the following table. The expenditure shown under Department of Supply includes the former Departments of Shipping and Fuel, Supply and Development, Supply and Shipping, and Munitions. This table covers expenditure by the service and associated departments only, and includes the cost of maintaining forces in Korea and at other oversea posts.

The figures represent the combined expenditures from revenue, trust and loan funds for the years 1938-39 and 1953-54 to 1957-58.

**DEFENCE SERVICES(a) : COMMONWEALTH EXPENDITURE FROM REVENUE, TRUST AND LOAN FUNDS.**

(£'000.)

Item.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Department of Defence</i> .. ..	61	634	643	760	857	931
<i>Department of the Navy—</i>						
Naval Forces—Pay, maintenance, etc.	2,592	34,642	34,311	35,273	31,728	31,635
Naval construction and additions to the fleet	1,643	5,996	6,422	4,884	3,392	5,825
Buildings, works, etc.	433	1,665	1,674	1,636	1,448	1,603
Advances to States under Commonwealth-State Housing Agreement	..	..	..	..	351	290
Administrative and miscellaneous expenditure	31	2,715	4,952	6,370	2,100	4,061
<i>Total</i> .. ..	4,699	45,018	47,359	48,163	39,019	43,414
<i>Department of the Army—</i>						
Military Forces—Pay, maintenance, etc.	2,941	44,719	38,653	39,808	40,683	37,243
Arms, armament, ammunition	1,129	15,201	18,435	16,374	14,092	13,891
Buildings, works, etc.	418	3,313	2,938	3,466	2,963	3,343
Advances to States under Commonwealth-State Housing Agreement	..	..	..	..	493	498
Administrative and miscellaneous expenditure	71	1,166	1,643	2,119	2,280	2,443
<i>Total</i> .. ..	4,559	64,399	61,669	61,767	60,511	57,418
<i>Department of Air—</i>						
Air Force—Pay, maintenance, etc.	1,304	21,539	22,744	24,081	25,200	27,736
Aircraft, equipment and stores	1,049	22,886	22,708	23,541	23,130	22,629
Buildings, works, etc.	489	3,312	2,587	3,013	2,662	2,869
Advances to States under Commonwealth-State Housing Agreement	..	..	..	..	345	387
Administrative and miscellaneous expenditure	12	1,103	1,357	1,734	1,906	2,096
<i>Total</i> .. ..	2,854	48,840	49,396	52,369	53,243	55,717
<i>Department of Supply(b)—</i>						
Defence research and development	..	7,465	9,328	10,689	10,362	10,509
Buildings, works, etc.	463	1,284	959	7,466	15,171	6,653
Administrative and miscellaneous expenditure	1,212	10,301	8,604	9,491	9,895	10,706
<i>Total</i> .. ..	1,675	19,050	18,891	27,646	35,428	27,868
<i>Economic assistance to support defence programme of S.E.A.T.O. member countries</i> .. ..	..	..	..	..	26	165
<i>Administration of National Service Act</i> .. ..	..	218	199	218	206	186
<i>Defence Equipment and Supplies(c)</i> .. ..	..	12,000	8,000	..	..	..
<i>Civil Defence</i> .. ..	..	..	33	89	130	95
<i>Recruiting Campaign</i> .. ..	..	..	..	372	224	327
<i>Other</i> .. ..	..	..	..	24	46	174
<i>Total Defence Services—</i>						
Consolidated Revenue Fund	8,863	190,159	186,190	191,408	189,690	186,295
Trust Funds	(d) 3,072	..	..	..	..	..
Loan Fund	1,913	..	..	..	..	..
<i>Grand Total</i> .. ..	13,848	190,159	186,190	191,408	189,690	186,295

(a) Excludes expenditure on debt charges, Audit charges, pension and superannuation payments, and Defence Division of the Department of the Treasury. (b) Includes Department of Defence Production, amalgamated with Department of Supply in 1957-58. (c) Paid to credit of Defence Equipment and Supplies Trust Account. (d) Expenditure from excess receipts of previous years appropriated for Defence Equipment Trust Account.

3. War and Repatriation Services.—Expenditure from Consolidated Revenue and Loan Fund for War and Repatriation Services and Post-war Charges in relation to both the 1914-18 and 1939-45 Wars is shown in the following table for the years 1938-39 and

1953-54 to 1957-58. Expenditure on the maintenance of forces in Korea and at other overseas posts and the cost of arms and equipment is included in Defence Services (*see* paragraph 2).

**WAR AND REPATRIATION SERVICES AND POST-WAR CHARGES : COMMONWEALTH EXPENDITURE FROM CONSOLIDATED REVENUE AND LOAN FUNDS.**

(£'000.)

Item.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Public Debt Charges—</i>						
Interest and Exchange .. ..	7,616	43,698	43,234	43,514	42,695	39,545
Debt Redemption .. ..	2,049	19,981	15,273	16,299	15,829	12,337
Other .. ..	224	249	376	214	279	163
<i>Total Public Debt Charges(a)</i> ..	<i>9,889</i>	<i>63,928</i>	<i>58,883</i>	<i>60,027</i>	<i>58,803</i>	<i>52,045</i>
War Gratuities .. ..						16
War and Service Pensions .. ..	8,228	39,425	44,548	47,307	(b)36,763	55,982
Commonwealth Reconstruction Training Scheme .. ..		502	314	221	256	340
War Service Land Settlement .. ..		5,506	4,789	8,790	9,550	10,302
Re-establishment loans for agricultural purposes .. ..		115	106	71	83	65
<i>Repatriation Department—</i>						
Repatriation benefits .. ..	631	11,500	11,720	12,278	13,069	14,182
Other benefits .. ..	119	443	486	473	555	730
Administration and general expenses(c)	315	3,568	3,639	3,937	3,806	3,933
Expenditure recovered(d) .. ..	-71	-1,281	-1,226	-1,082	-1,128	-1,022
<i>Total Repatriation Department</i> ..	<i>994</i>	<i>14,230</i>	<i>14,619</i>	<i>15,606</i>	<i>16,302</i>	<i>17,823</i>
War Service Homes—Salaries and general expenses .. ..	98	685	815	948	911	938
Other Departments—Miscellaneous expenditure .. ..	43	804	472	369	383	409
International Payments(e) .. ..		40	41	36	136	47
Other Administrations—Recoverable expenditure(f) .. ..		-921	-429	-1,266	-2,872	-1,340
<i>Capital Works and Services—</i>						
Repatriation Department .. ..	36	227	132	242	167	206
War Service Homes Act 1918-1949 ..	105	26,846	29,999	30,000	30,000	35,000
<i>Total Capital Works and Services</i> ..	<i>141</i>	<i>27,073</i>	<i>30,131</i>	<i>30,242</i>	<i>30,167</i>	<i>35,206</i>
<i>Total, War and Repatriation Services and Post-war Charges—</i>						
Consolidated Revenue Fund .. ..	19,393	147,188	150,250	154,729	142,463	163,130
Loan Fund .. ..		4,199	4,039	7,622	8,019	8,703
<b>Grand Total</b> .. ..	<b>19,393</b>	<b>151,387</b>	<b>154,289</b>	<b>162,351</b>	<b>150,482</b>	<b>171,833</b>

(a) Excludes Interest and Redemption on War (1914-18) Debt due to the United Kingdom Government, payment of which was suspended in 1931. (b) In addition, £13,400,000 was spent from balance of War Pensions Trust Account. (c) Revised to exclude Audit Charges. (d) From Service Departments and Australian Soldiers' Repatriation Trust Account. (e) Excludes International Monetary Fund charges. (f) Munitions, stores, etc., supplied to the Government of United Kingdom and other administrations. Includes repayments and waiver of war-time indebtedness of other administrations.

NOTE.—Minus sign (-) indicates excess of credits or repayments over expenditure.

4. **Subsidies and Bounties.**—The following table shows details, for the years 1938-39 and 1953-54 to 1957-58, of Commonwealth expenditure from revenue on subsidies, bounties and assistance to primary producers. Expenditure on special relief such as drought, frost, flood and bush fire, etc. (*see* table, p. 799, for more important items), is not included, nor is expenditure from the proceeds of certain taxes on primary products and profits from marketing schemes, which have been paid to trust funds for the purpose of price or other stabilization schemes or for distribution to producers (*see* paragraph 13, p. 811). Further information relating to these schemes and other assistance to primary producers is given in Chapter XXII.—Agricultural Production.

Details of price stabilization subsidies and of various forms of assistance to primary producers for earlier years may be found on pages 414 and 1014-15, respectively, of Official Year Book No. 38.

**SUBSIDIES AND BOUNTIES : COMMONWEALTH EXPENDITURE.**  
(£'000.)

Item.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>Subsidies—</b>						
<i>Price Stabilization—</i>						
Tea .. .. .		4,180	5,077	1,734	..	..
Coal .. .. .		200	185	27	..	..
Wheat Shipped to Tasmania—						
Freight Subsidy .. .. .		192	..	..	..	..
<i>Total</i> .. .. .		4,572	5,262	1,761	..	..
<i>Assistance to Primary Production—</i>						
Dairy Industry(a) .. .. .		15,400	15,750	14,500	13,500	13,500
Nitrogenous Fertilizers .. .. .		175	..	..	..	..
<i>Total</i> .. .. .		15,575	15,750	14,500	13,500	13,500
<i>Assistance to Gold-mining Industry</i> .. .. .		..	97	401	495	660
<i>Total Subsidies</i> .. .. .		20,147	21,109	16,662	13,995	14,160
<b>Bounties—</b>						
Tractor .. .. .		145	82	55	158	467
Wheat—for Stock Feed .. .. .		1,010	..	..	..	..
Sulphuric Acid .. .. .		..	306	513	421	709
Cellulose Acetate Flake .. .. .		..	..	..	179	110
Other .. .. .	(b)	236	42	163	261	214
<i>Total Bounties</i> .. .. .		236	1,173	430	731	1,500
<i>Grand Total</i> .. .. .		236	21,320	21,539	17,393	15,660

(a) Dairy products.

(b) Includes Raw Cotton Bounty, £115,000 and Sulphur Bounty, £88,000.

5. **Total Cost of Departments.**—Expenditure under this heading covers expenditure by departments, other than the Defence and Repatriation Departments and business undertakings, on administrative services and other activities. Expenditure on defence (other than interest and debt redemption in respect of the defence departments, which is included in the expenditure of the Department of the Treasury), war and repatriation services, subsidies and bounties, social services paid from the National Welfare Fund, business undertakings, Commonwealth territories and capital works and services is excluded.

Information on the functions of departments and the Acts administered by the Ministers of departments was published in Official Year Book No. 37, pages 76-86, and particulars of subsequent changes in departmental structure were given in later issues (see No. 43, p. 81).

In the following table, details are given of that expenditure on the branches of each department which might be termed running expenses. Miscellaneous expenditure and debt charges, etc., are not included in this table but are in the one following.

**COMMONWEALTH CONSOLIDATED REVENUE FUND : COST OF DEPARTMENTS—SALARIES, WAGES AND GENERAL EXPENDITURE.**  
(£'000.)

Department.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Governor-General</i> .. .. .	28	88	82	94	103	116
<b>Parliament—</b>						
Cost of Parliament .. .. .	279	1,183	1,281	1,419	1,621	1,704
Electoral Office .. .. .	105	434	427	532	507	605
<i>Total</i> .. .. .	384	1,617	1,708	1,951	2,128	2,309
<b>Prime Minister—</b>						
Department .. .. .	62	220	229	270	284	316
Audit Office .. .. .	38	464	506	609	603	622
Public Service Board .. .. .	51	440	485	597	589	619
National Library .. .. .	4	121	136	160	168	180
High Commissioner's Office—United Kingdom .. .. .	81	612	587	658	725	762
Commonwealth Grants Commission .. .. .	5	15	17	19	18	22
Office of Education .. .. .	..	149	156	194	186	182
Security Services .. .. .	..	332	362	422	425	483
<i>Total</i> .. .. .	241	2,353	2,478	2,929	2,998	3,186
<b>External Affairs—</b>						
Department .. .. .	20	419	441	486	580	619
Oversea representation .. .. .	..	1,280	1,232	1,444	1,484	1,569
<i>Total</i> .. .. .	20	1,699	1,673	1,930	2,064	2,188
<b>Treasury—</b>						
Department .. .. .	59	462	496	579	626	685
Taxation Branch and Boards of Review .. .. .	616	6,674	6,741	7,489	7,810	8,117
Bureau of Census and Statistics .. .. .	61	594	646	776	860	1,217
Commonwealth Superannuation Board .. .. .	9	80	82	89	87	94
<i>Total</i> .. .. .	745	7,810	7,965	8,933	9,383	10,113

For footnotes see next page.

COMMONWEALTH CONSOLIDATED REVENUE FUND: COST OF DEPARTMENTS—SALARIES, WAGES AND GENERAL EXPENDITURE—*continued.*  
(£'000.)

Department.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Attorney-General—</i>						
Department .. .. .	20	195	219	256	269	268
Crown Solicitor .. .. .	28	237	264	315	326	336
High Court .. .. .	34	85	96	109	115	111
Bankruptcy Administration .. .. .	44	113	122	146	161	170
Court of Conciliation and Arbitration .. .. .	24	174	180	199	211	219
Patents, Trade Marks and Designs .. .. .	71	381	379	388	396	407
Other Branches .. .. .	37	244	329	401	387	375
<i>Total</i> .. .. .	258	1,429	1,589	1,814	1,865	1,886
<i>Interior—</i>						
Department .. .. .	296	1,198	1,239	1,086	(a) 810	(a) 833
Meteorological Branch .. .. .	80	515	540	601	1,012	1,081
Ionospheric Prediction Service .. .. .	7	72	76	88	74	(b) 41
Forestry Branch .. .. .	10	90	93	116	126	154
News and Information Bureau .. .. .	..	(c)	(c)	271	268	277
<i>Total</i> .. .. .	393	1,875	1,948	2,162	2,290	2,386
<i>Works</i> .. .. .	(d)	1,909	2,077	2,401	2,103	2,125
<i>Civil Aviation</i> .. .. .	90	2,490	2,482	2,907	3,181	3,243
<i>Trade and Customs</i> .. .. .	721	3,367	3,650	(e) 3,992	(e) 3,920	(e) 4,130
<i>Health—</i>						
Department .. .. .	} 135	433	458	516	556	597
Quarantine .. .. .		222	222	238	261	278
Health Services .. .. .		459	505	608	639	659
<i>Total</i> .. .. .	135	1,114	1,185	1,362	1,456	1,534
<i>Trade—</i>						
Department .. .. .	(f)	(f)	(f)	425	918	1,028
Tariff Board .. .. .	(g)	(g)	(g)	68	73	89
Commercial Intelligence Services .. .. .	(f)	(f)	(f)	453	512	562
Abroad .. .. .	..	..	..	..	..	..
<i>Total</i> .. .. .	..	..	..	946	1,503	1,679
<i>Primary Industry—</i>						
Department .. .. .	} (f)	(f)	(f)	268	343	380
Inspection of goods for export .. .. .		(f)	(f)	1,007	996	1,043
Division of Agricultural Economics .. .. .		(f)	(f)	(h) 168	127	142
<i>Total</i> .. .. .	..	..	..	1,443	1,466	1,565
<i>Commerce and Agriculture—</i>						
Department .. .. .	58	385	428	} (i)	(i)	(i)
Inspection of goods for export .. .. .	175	740	841			
Commercial Intelligence Services .. .. .	..	..	..			
Abroad .. .. .	47	364	393			
Division of Agricultural Economics and Division of Agricultural Production .. .. .	..	140	152			
<i>Total</i> .. .. .	280	1,629	1,814			
<i>Social Services—Department</i> .. .. .	139	2,357	2,436	2,632	2,767	3,085
<i>Shipping and Transport—</i>						
Department .. .. .	..	127	136	160	158	169
Marine Branch .. .. .	208	813	816	898	953	979
Ship Construction .. .. .	..	91	17	16	16	16
<i>Total</i> .. .. .	208	1,031	969	1,074	1,127	1,164
<i>Territories—Department</i> .. .. .	(j)	154	154	184	214	264
<i>Immigration—Department</i> .. .. .	(d)	1,189	1,378	1,727	1,795	1,879
<i>Labour and National Service—Department</i> .. .. .	..	1,717	1,757	1,967	2,010	2,071
<i>National Development—</i>						
Department .. .. .	..	376	350	335	215	227
Bureau of Mineral Resources .. .. .	..	434	379	522	586	785
Division of National Mapping .. .. .	..	(c)	(c)	(c)	230	307
<i>Total</i> .. .. .	..	810	729	857	1,031	1,319
<i>Commonwealth Scientific and Industrial Research Organization—Department</i> .. .. .	195	3,534	3,989	4,716	4,959	5,427
<i>Atomic Energy Commission</i> .. .. .	..	253	430	640	699	1,331
<i>Total All Departments</i> .. .. .	3,837	38,425	40,492	46,661	49,062	53,000

(a) Excludes Division of National Mapping now included under Department of National Development.  
 (b) Excludes Observatory now transferred to Australian National University. (c) Included with Interior—Department.  
 (d) Included with Department of the Interior. (e) Department of Customs and Excise. (f) See Department of Commerce and Agriculture. (g) Included with Department of Trade and Customs.  
 (h) Includes Division of Agricultural Production. In subsequent years this is included under Primary Industry—Department. (i) See Departments of Trade and Primary Industry.  
 (j) Included with Prime Minister's Department.

The following table gives details of miscellaneous expenditure included in the total cost of departments. It covers such items as interest and debt redemption in respect of departments (including defence departments) which is included under expenditure by the Department of the Treasury, repairs and maintenance of buildings, and special expenditure for which the Commonwealth is committed, such as contributions to international organizations, payment of Commonwealth scholarships, etc. The costs of social services, which are paid from the National Welfare Fund, are not included in this table (see pp. 800-801 for this information).

COMMONWEALTH CONSOLIDATED REVENUE FUND : COST OF DEPARTMENTS—MISCELLANEOUS EXPENDITURE.(a)

(£'000.)

Department.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Governor-General</i> .. .. .	1	6	25	29	47	42
<i>Parliament—</i>						
Cost of elections .. .. .	3	240	15	301	19	7
Other .. .. .	12	36	26	36	52	64
<i>Total</i> .. .. .	15	276	41	337	71	71
<i>Prime Minister—</i>						
Commonwealth Scholarship Scheme and financial assistance to University students .. .. .	..	917	984	1,111	1,190	1,311
Australian National University .. .. .	..	650	748	877	965	1,196
Bush fire and flood relief, etc. .. .. .	19	108	598	394	555	254
Other .. .. .	24 <sup>o</sup>	875	456	894	992	486
<i>Total</i> .. .. .	268	2,550	2,786	3,276	3,702	3,247
<i>External Affairs—</i>						
United Nations and Allied Organizations .. .. .	(b) 46	632	647	659	769	828
Advance to United Nations—Cost of clearance Suez Canal .. .. .	..	..	..	..	449	..
Australian National Antarctic Research Expeditions .. .. .	..	224	213	269	342	389
International development and relief .. .. .	..	3,574	3,429	5,285	5,668	5,666
Contributions to other international agencies, etc. .. .. .	4	112	170	139	177	210
<i>Total</i> .. .. .	50	4,542	4,459	6,352	7,405	7,093
<i>Treasury—</i>						
Interest (including exchange) .. .. .	3,229	5,309	6,089	8,174	9,228	10,928
Debt Redemption(c) .. .. .	614	708	556	625	599	620
Other(d) .. .. .	259	2,086	4,093	2,896	5,529	6,661
<i>Total</i> .. .. .	4,102	8,103	10,738	11,695	15,356	18,209
<i>Attorney-General</i> .. .. .	18	86	81	75	87	99
<i>Interior—</i>						
Other departments in Canberra—Transport services, fuel, light and power; oversea publicity, etc. .. .. .	..	318	358	412	478	517
Other .. .. .	102	354	373	434	549	613
<i>Total</i> .. .. .	102	672	731	846	1,027	1,130
<i>Works</i> .. .. .	(e)	119	116	129	146	171
<i>Civil Aviation—</i>						
Maintenance and development of civil aviation .. .. .	162	3,883	4,080	4,617	5,048	5,661
Domestic and international air services—Mails, subsidies, etc. .. .. .	56	3,573	3,543	(f)	(f)	(f)
Meteorological maintenance services and other .. .. .	8	611	603	407	629	620
<i>Total</i> .. .. .	226	8,067	8,226	5,024	5,677	6,281
<i>Trade and Customs—</i>						
Refunds of Diesel Fuel Taxation .. .. .	..	..	..	..	..	1,314
Other .. .. .	37	165	146	(g) 102	(g) 90	(g) 117
<i>Total</i> .. .. .	37	165	146	102	90	1,431
<i>Health—</i>						
Miscellaneous expenditure on health .. .. .	93	377	472	509	563	618
Other .. .. .	14	76	85	109	98	141
<i>Total</i> .. .. .	107	453	557	618	661	759
<i>Trade—</i>						
Export Payments Insurance Corporation .. .. .	} (h)	(h)	(h)	{ 199	465	35
Other .. .. .	..	..	..	412	412	504
<i>Total</i> .. .. .	..	..	..	199	877	539

For footnotes see next page.

COMMONWEALTH CONSOLIDATED REVENUE FUND: COST OF DEPARTMENTS—MISCELLANEOUS EXPENDITURE(a)—*continued*.  
(£'000.)

Department.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Primary Industry—</i>						
Wool Use Promotion and Research .. .. .				426	489	885
Fisheries development .. .. .				125	270	215
Australian Wool Testing Authority—						
Advance .. .. .						8
Other .. .. .				106	161	190
Total .. .. .				637	920	1,298
<i>Commerce and Agriculture—</i>						
Wool use publicity, promotion and research	74	386	392			
Other .. .. .	162	387	170			
Total .. .. .	236	773	562			
<i>Social Services—</i>						
Compassionate allowances, assistance						
Homes for Aged, etc. .. .. .						
Other .. .. .	186	116	546	535	884	971
Total .. .. .	186	183	612	596	939	1,033
<i>Shipping and Transport—</i>						
Shipping subsidies, etc. .. .. .		148	170	607	357	328
Merchant Ship Construction—Subsidy .. .. .		(j) 569	(j) 631	(j) 593	1,433	1,858
Railway fare and freight concessions .. .. .					2	2
Oversea Coal—Loss on Emergency Transport .. .. .				828		
Overseas Telecommunications Commission—coastal radio service .. .. .					183	180
Other .. .. .	7	49	52	44	59	64
Total .. .. .	7	766	853	2,072	2,034	2,432
<i>Territories .. .. .</i>	(k)		2	1	1	2
<i>Immigration—</i>						
Assisted migration .. .. .	(e)	3,644	5,791	6,270	5,724	6,835
Other migration activities .. .. .	(e)	1,960	1,649	2,035	1,936	1,870
Other .. .. .	(e)	205	255	315	300	250
Total .. .. .	(e)	5,809	7,695	8,620	7,960	8,955
<i>Labour and National Service .. .. .</i>		87	89	109	114	129
<i>National Development—</i>						
Joint Coal Board .. .. .		621	282	246	386	195
Other .. .. .		71	172	140	58	327
Total .. .. .		692	454	386	444	522
<i>Commonwealth Scientific and Industrial Research Organization—</i>						
Miscellaneous grants to scientific bodies .. .. .	28	98	110	100	109	124
Other .. .. .		18	24	29	46	46
Total .. .. .	28	116	134	129	155	170
<b>Total, All Departments .. .. .</b>	<b>5,383</b>	<b>33,465</b>	<b>38,307</b>	<b>41,252</b>	<b>47,713</b>	<b>53,613</b>

(a) Includes rent, repairs and maintenance. Pension and superannuation contributions and interest and debt redemption in respect of the various departments are included under the Department of the Treasury. Payments to States from Departmental Miscellaneous Expenditure—Cattle Tick Control, Dairy Industry Efficiency Grant, Agricultural Advisory Services and Tobacco Industry Assistance—have been excluded. (b) League of Nations. (c) Unallocated debt charges, in respect of all departments including defence departments. (d) Includes pension and superannuation contributions in respect of all departments, including defence departments. (e) Included with Department of the Interior. (f) Expenditure from Postmaster-General's Department. (g) Department of Customs and Excise. (h) See Department of Commerce and Agriculture. (i) See Departments of Trade and Primary Industry. (j) Provided under Capital Works and Services votes. (k) Included with Prime Minister's Department.

6. **National Welfare Fund.**—The National Welfare Fund was established for the purpose of providing a fund for the payment of Commonwealth social services benefits. During the year 1949-50, an amount equivalent to the total collections of pay-roll tax and social services contribution was paid to the fund from Consolidated Revenue. During 1950-51, the social services contribution was amalgamated with the normal income tax and it became necessary to base the contributions on another formula. For the year 1950-51, the amount paid to the fund was the total of collections of pay-roll tax and social services contribution plus £30,000,000. In 1951-52, the amount paid to the fund was the amount paid in 1950-51 increased in the same proportion as collections of pay-roll tax increased over the collections of pay-roll tax in 1950-51. By an amendment to the National Welfare Fund Act 1943-1950, the amount to be paid to the fund in 1952-53 and subsequent years was changed to the amount of moneys paid out of the fund. In addition to these payments from Consolidated Revenue, the fund received a small amount of interest from investments.

In the following table, details are given of the income and expenditure of the National Welfare Fund and the balance in the fund at the end of each year for the years 1953-54 to 1957-58. A dissection of expenditure into the various types of benefits is given in Chapter XVIII.—Welfare Services (*see p. 668*).

NATIONAL WELFARE FUND : RECEIPTS, EXPENDITURE AND BALANCES.  
(£'000.)

Year.	Income.			Expenditure.	Balance in Fund at end of Year.
	Contribution from Consolidated Revenue.	Interest on Investments.	Total.		
1953-54 .. .. .	176,565	2,094	178,659	176,565	188,930
1954-55 .. .. .	189,319	2,108	191,427	189,319	191,038
1955-56 .. .. .	214,866	2,086	216,952	214,866	193,124
1956-57 .. .. .	223,923	1,938	225,861	223,923	195,062
1957-58 .. .. .	247,485	1,958	249,443	247,485	197,020

7. *Debt Redemption Reserve Trust Account.*—Section 4 of the Appropriation Act (No. 2), 1953-1954 provided for payments from the Consolidated Revenue Fund of such sums as the Treasurer may determine. These sums are appropriated to the Debt Redemption Reserve Trust Account for the purpose of expenditure in redeeming any securities forming part of the National Debt of the Commonwealth.

The following payments were made to the Trust Account from the Consolidated Revenue Fund.—1953-54, £56,271,000; 1954-55, £70,151,000. There was no expenditure from the Trust Account until November, 1955, when the total balance of £126,422,000 was paid to the credit of the Loan Consolidation and Investment Reserve. The balance of the Trust Account at 30th June, 1954 and 1955, formed part of General Trust Funds which were invested in special loans to finance Commonwealth and State works programmes.

8. *Loan Consolidation and Investment Reserve Trust Account.*—The Loan Consolidation and Investment Reserve Act 1955 established the Loan Consolidation and Investment Reserve Trust Account for the purpose of repurchase or redemption of securities representing portion of the public debt of the Commonwealth.

In 1955-56, the Account was credited with a transfer from the Debt Redemption Reserve Trust Account of £126,422,000. Payments from the Consolidated Revenue Fund were made as follows:—1955-56, £61,613,000; 1956-57, £194,793,000; and 1957-58, £104,378,000. Expenditure from the Trust Account on repurchase of securities was £28,701,000 in 1955-56; £43,443,000 in 1956-57; and £132,767,000 in 1957-58. The major portion of the balance of the Trust Account at 30th June, 1957 and 1958, was invested in Commonwealth securities in special loans to finance Commonwealth and State works programmes.

9. *Business Undertakings.*—(i) *Postmaster-General's Department.* From the beginning of 1949-50, Broadcasting Services have been separated from the Postmaster-General's Department. Prior to 1949-50, part of the expenditure on these services was included with that of the Postmaster-General's Department. Details of the expenditure of this Department for the years 1938-39 and 1953-54 to 1957-58 are given in the following table:—

POSTMASTER-GENERAL'S DEPARTMENT : EXPENDITURE.  
(£'000.)

Item.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Salaries, stores and materials, mail, engineering services, etc.	11,485	66,619	70,568	80,644	86,301	91,777
Superannuation, Pensions, etc.	392	1,214	1,490	1,606	1,745	2,024
Rents, repairs, etc. .. .. .	114	878	977	1,054	1,117	1,339
Interest and Exchange .. .. .	1,758	1,220	1,556	885	862	833
Debt Redemptions .. .. .	1,129	2,313	1,655	1,438	1,172	979
<i>Total Working, etc., Expenses</i> .. .. .	<i>14,878</i>	<i>72,244</i>	<i>76,246</i>	<i>85,627</i>	<i>91,197</i>	<i>96,952</i>
Capital Works and Services .. .. .	3,851	25,986	25,839	28,970	30,721	34,811
<b>Grand Total</b> .. .. .	<b>18,729</b>	<b>98,230</b>	<b>102,085</b>	<b>114,597</b>	<b>121,918</b>	<b>131,763</b>

Further details of expenditure for 1957-58 on account of the Postmaster-General's Department appear in Chapter XIV.—Transport and Communication (Part II., Division A., Posts; Telegraphs; Telephones; Cable and Radio Communication).

(ii) *Broadcasting Services.* Since 1949-50, all expenditure on broadcasting services has been brought together in one section. Previously these services had been financed partly by the Postmaster-General's Department and partly from the Wireless Broadcasting Trust Account. Details of expenditure for the years 1953-54 to 1957-58 are shown in the following table.

**COMMONWEALTH BROADCASTING SERVICES : EXPENDITURE.**  
(£'000.)

Item.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Australian Broadcasting Control Board ..	77	83	106	153	153
Australian Broadcasting Commission— Salaries, general and programme expenses .. .. .	2,590	2,702	3,250	4,633	5,100
Technical and other Services—Postmaster- General—Sound Broadcasting .. .. .	2,006	2,068	2,210	1,844	1,995
—Television .. .. .	..	..	..	53	58
Repairs, maintenance, etc. .. .. .	11	18	24	18	28
<i>Total Working, etc., expenses</i> .. .. .	<u>4,684</u>	<u>4,871</u>	<u>5,590</u>	<u>6,701</u>	<u>7,334</u>
Capital Works and Services .. .. .	281	273	817	2,697	1,583
<b>Grand Total</b> .. .. .	<b>4,965</b>	<b>5,144</b>	<b>6,407</b>	<b>9,398</b>	<b>8,917</b>

(iii) *Railways.* The Commonwealth Railways, previously administered by the Department of the Interior, were transferred in March, 1950, to the newly formed Department of Fuel, Shipping and Transport, which became the Department of Shipping and Transport in May, 1951. The expenditure on railways for the years 1938-39 and 1953-54 to 1957-58 is shown below.

**COMMONWEALTH RAILWAYS : EXPENDITURE.**  
(£'000.)

Item.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>Working expenses—</b>						
Trans-Australian .. .. .	494	1,352	1,412	1,705	2,057	2,277
North Australia .. .. .	55	139	158	183	239	221
Central Australia .. .. .	214	1,359	1,322	1,152	1,238	1,090
Aust. Capital Territory .. .. .	7	43	40	45	50	50
Interest and Exchange .. .. .	455	406	410	388	385	390
Debt Redemption .. .. .	75	155	163	172	180	189
Superannuation .. .. .	14	50	58	59	59	68
Miscellaneous(a) .. .. .	17	23	59	17	36	36
<i>Total Working, etc., ex- penses</i> .. .. .	<u>1,331</u>	<u>3,527</u>	<u>3,622</u>	<u>3,721</u>	<u>4,244</u>	<u>4,321</u>
Capital Works and Services .. .. .	142	3,382	3,100	2,674	3,422	2,545
<b>Grand Total</b> .. .. .	<b>1,473</b>	<b>6,909</b>	<b>6,722</b>	<b>6,395</b>	<b>7,666</b>	<b>6,866</b>

(a) Includes loan redemption and conversion expenses, 1954-55, £19,000.

Additional details of the financial operations of the Commonwealth Railways to 1957-58 are given in Chapter XIV.—Transport and Communication (Part I., Division B. Government Railways).

10. *Territories.*—The following table shows the expenditure on account of Commonwealth Territories for the years 1938-39 and 1953-54 to 1957-58. The Australian Capital Territory is administered by the Department of the Interior, and the Department of Territories controls the Northern Territory and the external territories. The expenditure has been grouped in one table for convenience. Information in greater detail will be found in the annual bulletin, *Finance, Part I.—Public and Private Finance.*

COMMONWEALTH TERRITORIES : EXPENDITURE.  
(£'000.)

Territory.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Administration and Maintenance of Services—</i>						
Australian Capital Territory(a)	637	2,652	2,786	2,663	3,062	3,359
Northern Territory (a)	403	2,622	2,829	3,275	3,810	4,487
Papua .. .. .	49	5,821	7,322	8,623	9,581	11,383
New Guinea .. .. .	6					
Norfolk Island .. .. .	5	58	34	30	37	33
Cocos (Keeling) Islands .. .. .	..	..	..	12	20	26
<i>Total</i> .. .. .	<i>1,100</i>	<i>11,153</i>	<i>12,971</i>	<i>14,603</i>	<i>16,510</i>	<i>19,288</i>
<i>Capital Works and Services—</i>						
Australian Capital Territory(a)	244	2,642	3,342	5,181	4,957	8,394
Northern Territory(a)	495	1,452	1,818	2,861	2,798	3,300
Papua and New Guinea .. .. .	..	417	8	5	215	8
Cocos (Keeling) Islands .. .. .	..	..	..	2	57	47
<i>Total</i> .. .. .	<i>739</i>	<i>4,511</i>	<i>5,168</i>	<i>8,049</i>	<i>8,027</i>	<i>11,749</i>

(a) Excludes Railways, see para 10 (iii).

11. Capital Works and Services.—In the following table, details are given of Commonwealth expenditure on capital works and services during each of the years 1938-39 and 1953-54 to 1957-58. The table covers all expenditure on capital works and services made from the Consolidated Revenue Fund, the Loan Fund and Trust Funds.

COMMONWEALTH EXPENDITURE ON CAPITAL WORKS AND SERVICES FROM REVENUE, TRUST AND LOAN FUNDS.  
(£'000.)

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Defence and War—</i>						
Navy .. .. .	2,076	9,248	11,746	11,288	5,602	9,814
Army .. .. .	1,547	11,172	14,033	12,467	10,138	10,732
Air Force .. .. .	1,538	3,312	2,587	3,013	3,007	3,256
Munitions and other .. .. .	1,173	4,781	4,637	11,711	19,669	10,958
<i>Repatriation Services—</i>						
War Service Homes .. .. .	105	26,846	29,999	30,000	30,000	35,000
Other .. .. .	..	227	132	242	167	206
Postmaster-General's Department .. .. .	3,849	25,986	25,837	28,969	30,715	34,807
Broadcasting Services .. .. .	..	281	273	817	2,697	1,583
<i>Railways—</i>						
Commonwealth .. .. .	142	3,381	3,099	2,669	3,422	2,543
<i>Territories—</i>						
Australian Capital Territory .. .. .	488	2,630	3,338	5,177	4,954	8,390
Northern Territory .. .. .	244	1,452	1,818	2,861	2,798	3,300
Papua-New Guinea .. .. .	..	417	8	5	215	8
Cocos (Keeling) Islands .. .. .	..	..	..	2	57	47
<i>Other—</i>						
Ships, yards and docks .. .. .	-300	3,494	3,228	3,589	1,343	..
Civil Aviation .. .. .	419	4,933	3,657	3,881	3,657	4,098
Snowy Mountains Scheme .. .. .	..	13,170	13,200	15,146	18,000	18,350
Immigration .. .. .	..	558	208	319	253	297
Health .. .. .	35	409	383	639	384	549
Subscriptions to Capital(a) .. .. .	..	1,000	1,000	1,200	1,500	1,750
Advances(b) .. .. .	..	2,451	2,403	205	432	1,297
All other works, buildings, etc.(c) .. .. .	243	4,934	4,953	5,887	6,919	10,527
<i>Total</i> .. .. .	<i>11,559</i>	<i>120,682</i>	<i>126,539</i>	<i>140,087</i>	<i>145,929</i>	<i>157,512</i>
<i>Source of Funds—</i>						
Consolidated Revenue Fund .. .. .	6,715	120,695	126,546	140,096	145,938	157,522
Loan Fund .. .. .	1,598	-13	-7	-9	-9	-10
Trust Funds(d) .. .. .	3,246	..	..	..	..	..
<i>Total</i> .. .. .	<i>11,559</i>	<i>120,682</i>	<i>126,539</i>	<i>140,087</i>	<i>145,929</i>	<i>157,512</i>

(a) Excludes Commonwealth New Guinea Timbers Ltd. included under Territories. (b) Excludes Overseas Telecommunications Commission included under Postmaster-General's Department. (c) Revised to exclude Grants to States for Railway Standardization. (d) From National Defence Contributions Trust Account and other trust funds.

NOTE.—Minus sign (-) indicates excess of credits or repayments over expenditure.

12. Payments to or for the States.—(i) *General.* An outline of the provisions of the Constitution requiring the Commonwealth to make payments to the States, and of the systems which followed, is given in earlier issues of the Official Year Book (see No. 37,

pp. 633 to 638). In the following paragraphs, reference is made to the arrangements at present in operation.

(ii) *Amounts Paid.* (a) *Years 1956-57 and 1957-58.* The tables below show particulars of the amounts paid to each of the States as grants for the several purposes referred to in subsequent paragraphs.

**COMMONWEALTH PAYMENTS TO OR FOR THE STATES, 1956-57.(a)**  
(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
Financial Agreement—							
Interest on States' Debts ..	2,918	2,127	1,096	704	473	267	7,585
Sinking Fund on States' Debts (b)	1,631	1,054	576	607	455	297	4,640
Special Grants ..				5,800	9,200	3,500	18,500
Tax Reimbursement Grants ..	58,342	40,228	24,367	14,049	12,251	5,385	154,622
Special Financial Assistance ..	6,926	5,826	2,893	1,667	1,454	639	19,405
Commonwealth Aid Roads (c) ..	8,587	5,495	6,009	3,509	6,105	1,564	31,269
Tuberculosis Act 1948—Reimbursement of Capital Expenditure ..	989	120	672	90	504	6	2,381
Mental Institutions—Contribution to Capital Expenditure ..	384	527	88	128	52	69	1,248
Western Australia Waterworks Grant					462		462
Coal Mining Industry—Long Service Leave (c) ..	474	1	87		27	8	597
Imported Houses—Grants ..		2					2
Contribution to South Australia—Port Augusta to Port Pirie Railway				20			20
Encouragement of Meat Production			82		52		134
Grants to Universities ..	872	522	310	271	194	93	2,262
Cattle Tick Control ..	675						675
Tobacco Industry Assistance ..	3	5	8		5		21
Dairy Industry Extension Grant ..	60	60	65	23	19	10	237
Expansion of Agricultural Advisory Services ..	70	61	60	21	34	24	270
Grants for Railway Standardization (d) ..				280			280
<b>Total .. ..</b>	<b>81,951</b>	<b>56,028</b>	<b>36,313</b>	<b>27,169</b>	<b>31,287</b>	<b>11,862</b>	<b>244,610</b>

(a) Excludes relief to primary producers and other payments for medical research, etc. (b) Paid to National Debt Sinking Fund. (c) Paid to Trust Fund. (d) Grants only—excludes repayable advances.

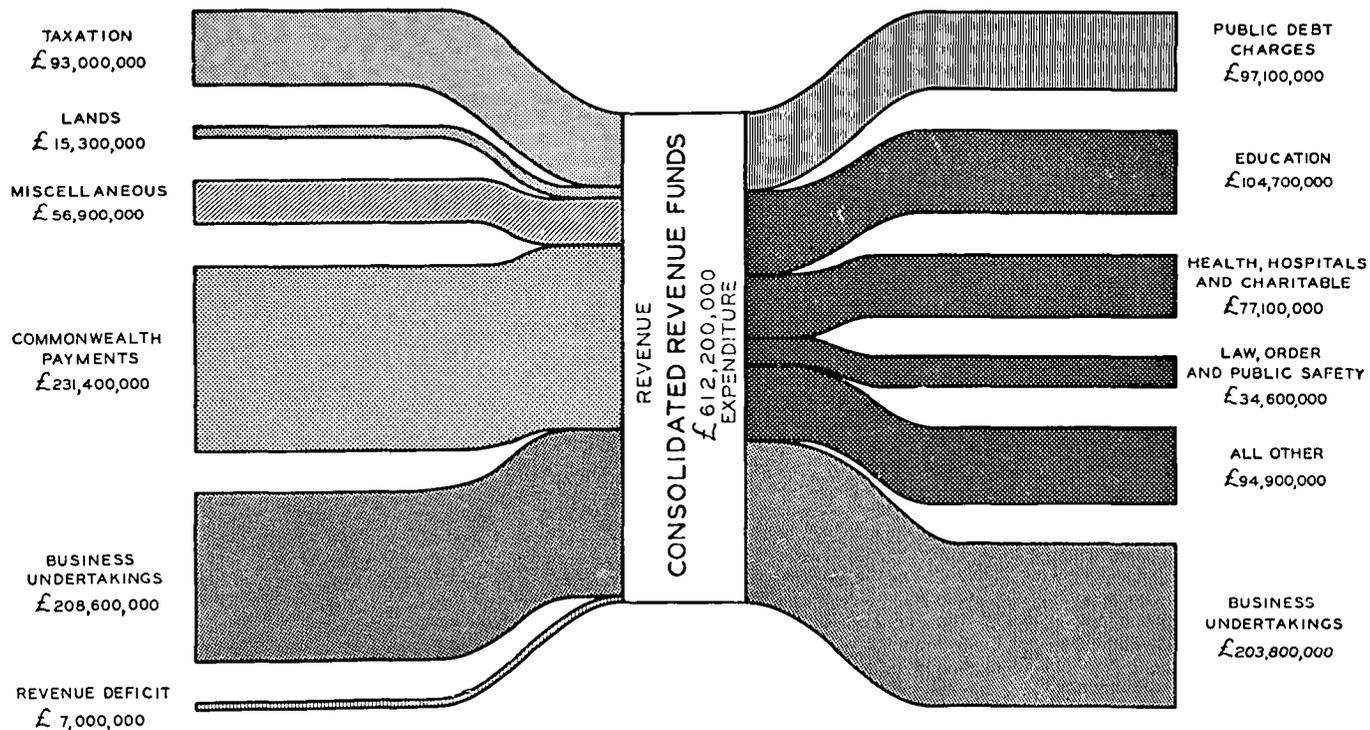
**COMMONWEALTH PAYMENTS TO OR FOR THE STATES, 1957-58.(a)**  
(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
Financial Agreement—							
Interest on States' Debts ..	2,918	2,127	1,096	704	473	267	7,585
Sinking Fund on States' Debts (b)	1,787	1,155	631	668	497	327	5,065
Special Grants ..				5,700	10,150	3,650	19,500
Tax Reimbursement Grants ..	61,721	43,996	25,919	15,259	13,061	5,864	165,820
Special Financial Assistance ..	8,989	6,405	3,774	2,221	1,902	854	24,145
Additional Financial Assistance ..	1,989	1,061	1,125	368	315	142	5,000
Commonwealth Aid Roads (c) ..	8,695	5,564	6,085	3,554	6,183	1,583	31,664
Commonwealth Aid Roads—Special Assistance ..	800	700	500	325	475	150	2,950
Tuberculosis Act 1948—Reimbursement of Capital Expenditure ..	593	76	678	108	683	4	2,142
Mental Institutions—Contribution to Capital Expenditure ..	324	545	114	152	30	91	1,256
Western Australia Waterworks Grant					677		677
Coal Mining Industry—Long Service Leave (c) ..	472	1	80		28	9	590
Encouragement of Meat Production			93		5		98
Grants to Universities ..	1,195	664	425	414	253	123	3,074
Cattle Tick Control ..	536						536
Tobacco Industry Assistance ..	2	3	6		4		15
Dairy Industry Extension Grant ..	55	60	70	13	15	6	219
Expansion of Agricultural Advisory Services ..	75	69	58	24	27	12	265
Eradication of Argentine Ants ..					1		1
Grants for Railway Standardization (d) ..	165	165		419			749
<b>Total .. ..</b>	<b>90,316</b>	<b>62,591</b>	<b>40,654</b>	<b>29,929</b>	<b>34,779</b>	<b>13,082</b>	<b>271,351</b>

(a) Excludes relief to primary producers and other payments for medical research, etc. (b) Paid to National Debt Sinking Fund. (c) Paid to Trust Fund. (d) Grants only—excludes repayable advances.



STATE CONSOLIDATED REVENUE FUNDS, YEAR ENDED 30<sup>TH</sup>. JUNE, 1958



(b) 1938-39 and 1953-54 to 1957-58. The following table shows particulars of payments by the Commonwealth to or on behalf of the States during each of these years.

COMMONWEALTH PAYMENTS TO OR FOR THE STATES.(a)  
(£'000.)

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Financial Agreement—						
Interest on States' Debts	7,585	7,585	7,585	7,585	7,585	7,585
Sinking Fund on States' Debts(b)	1,478	3,463	3,947	4,310	4,640	5,065
Special Grants	2,020	15,400	12,300	18,500	18,500	19,500
Tax Reimbursement Grants	..	120,415	130,046	141,578	154,622	165,820
Special Financial Assistance	..	21,915	19,902	15,348	19,405	24,145
Additional Financial Assistance	..	..	..	..	..	5,000
Grants for Road Construction, etc.	4,266	16,457	21,461	26,519	31,269	31,664
Commonwealth Aid Roads—Special Assistance	..	..	..	..	..	2,950
Commonwealth Aid Roads (Supplementary) Trust Account	..	5,000	..	..	..	..
Tuberculosis Act 1948—Reimbursement of Capital Expenditure	..	1,380	1,709	1,758	2,381	2,142
Mental Institutions—Contribution to Capital Expenditure	..	..	..	773	1,248	1,256
Price Control Reimbursement	..	84	..	..	..	..
Local Public Works—Interest and Sinking Fund	100	..	..	..	..	..
Youth Employment	200	..	..	..	..	..
Western Australian Waterworks	..	333	366	682	462	677
Coal Mining Industry—Long Service Leave(c)	..	579	600	565	597	590
Imported Houses—Grants	..	615	88	..	2	..
Contribution to South Australia—Port Augusta to Port Pirie Railway	20	20	20	20	20	..
Encouragement of Meat Production	..	413	261	303	134	98
Grants to Universities	..	1,389	1,544	1,651	2,262	3,074
Cattle Tick Control	70	53	250	552	675	536
Tobacco Industry Assistance	10	16	12	15	21	15
Dairy Industry Extension Grant	..	232	230	228	237	219
Expansion of Agricultural Advisory Services	..	122	193	237	270	265
Eradication of Argentine Ants	..	..	..	..	..	1
Grants for Railway Standardization(d)	..	519	423	283	280	749
Total	15,749	195,990	200,937	220,907	244,610	271,351

(a) Excludes relief to primary producers and other payments for medical research, etc. (b) Paid to National Debt Sinking Fund. (c) Paid to Trust Fund. (d) Grants only—excludes repayable advances.

Particulars of special Commonwealth grants for the relief of primary producers are not included in the foregoing tables. For details see Chapter XXII.—Agricultural Production. See also para. 4, Subsidies and Bounties, and para. 13, Other Expenditure, of this subsection.

(iii) *Financial Agreement.* Details of the Financial Agreement between the Commonwealth and the States are given in Official Year Book No. 37, pages 685 to 690. Under this Agreement, the Commonwealth undertook to contribute £7,584,912 per annum towards interest payable on the State Debts for a period of 58 years from 1st July, 1927. This amount is to be distributed amongst the States as follows:—New South Wales, £2,917,411; Victoria, £2,127,159; Queensland, £1,096,235; South Australia, £703,816; Western Australia, £473,432; Tasmania, £266,859.

These amounts are equal to the sums paid by the Commonwealth to each State in the year 1926-27 at the rate of 25s. per head of population, the rate at which the Commonwealth had contributed annually to the States since 1st July, 1910, as compensation for the States relinquishing, after Federation, the right to levy Customs and Excise Duties.

In addition, under the Financial Agreement, the Commonwealth agreed to make certain contributions to the National Debt Sinking Fund for redemption of State Debts. Details of these payments are given in Division D of this Chapter, § 2, page 832.

(iv) *Special Grants.* The Constitution provides in Section 96 for the granting of special financial assistance to the States. Prior to 1933, financial assistance of varying amounts was granted by the Commonwealth to South Australia, Western Australia and Tasmania. Details of this may be found in earlier issues of the Official Year Book (see No. 40, p. 695).

In 1933, the Commonwealth Government appointed the Commonwealth Grants Commission of three members to inquire into and report upon claims made by any State for a grant of financial assistance and any matters relevant thereto.

Applications have been received from South Australia, Western Australia and Tasmania each year from 1933 onwards and the recommendations of the Commission in respect of the years 1938–39 and 1954–55 to 1958–59 are shown in the following table. Commencing with 1949–50, the Commission has divided the grants recommended into two parts. One part is the Commission's estimate of the indispensable need of the claimant State for the year in which the payment is to be made after allowing a sufficient margin for safety. The other part is an adjustment of this estimate for an earlier year after an examination of the audited accounts for that year. Thus the grants for 1958–59 include an estimate of the indispensable need of the claimant State for 1958–59 and an adjustment to the estimated grant for 1956–57.

**COMMONWEALTH GRANTS COMMISSION : GRANTS RECOMMENDED.**

(£'000.)

Particulars.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
<i>South Australia—</i>						
Estimated grant .. ..	1,040	3,350	5,940	5,760	4,858	5,201
Adjustment(a) .. ..	..	-1,100	-540	40	842	49
<i>Net grant recommended</i> .. ..	<i>1,040</i>	<i>2,250</i>	<i>5,400</i>	<i>5,800</i>	<i>5,700</i>	<i>5,250</i>
<i>Western Australia—</i>						
Estimated grant .. ..	570	7,100	8,875	9,102	9,828	9,758
Adjustment(a) .. ..	..	350	25	98	322	1,342
<i>Net grant recommended</i> .. ..	<i>570</i>	<i>7,450</i>	<i>8,900</i>	<i>9,200</i>	<i>10,150</i>	<i>11,100</i>
<i>Tasmania—</i>						
Estimated grant .. ..	410	3,200	4,384	3,657	4,466	4,414
Adjustment(a) .. ..	..	-600	-184	-157	-816	-14
<i>Net grant recommended</i> .. ..	<i>410</i>	<i>2,600</i>	<i>4,200</i>	<i>3,500</i>	<i>3,650</i>	<i>4,400</i>
<b>Grand Total</b> .. ..	<b>2,020</b>	<b>12,300</b>	<b>18,500</b>	<b>18,500</b>	<b>19,500</b>	<b>20,750</b>

(a) Adjustment to estimated grant paid two years previously.

(v) *Tax Reimbursement Grants.* Details of the States Grants (Income Tax Reimbursement) Act 1942 and the States Grants (Entertainments Tax Reimbursement) Act 1942 are given in earlier issues of the Official Year Book (see No. 37, pp. 635 to 637). These Acts provided for grants to the States as compensation for vacating the fields of Income Tax and Entertainments Tax. Grants under these Acts ceased after 1945–46 and were replaced by grants under the States Grants (Tax Reimbursement) Act 1946–1948.

This Act provided for reimbursement grants of certain specified amounts to be paid to the States during 1946–47 and 1947–48. For 1948–49 and subsequent years, the grants were assessed on the aggregate paid in 1947–48 (£45,000,000) increased in accordance with a formula based on increases in population and average wages. Details of the formula and of the treatment of arrears of State income taxes were given in earlier issues of the Official Year Book (see No. 40, p. 696).

In 1950–51, an amount of £5,000,000 was paid to the States under the States Grants (Additional Tax Reimbursement) Act 1950. As this was considered a non-recurring grant, the formula mentioned above was not amended.

(vi) *Special Financial Assistance Grants.* During the years 1953-54 to 1957-58, there were heavy additions to the financial needs of the States and special assistance grants amounting to £21,915,000, £19,902,000, £15,348,000, £19,405,000 and £24,145,000 respectively were made. For details of amounts paid to each State during 1957-58 see page 804 and for other years see earlier issues of the Official Year Book or the annual bulletin *Finance, Part I, Public and Private Finance.*

(vii) *Additional Financial Assistance.* The States Grants (Additional Assistance) Act 1958 provided for the payment of £5,000,000 from the Consolidated Revenue Fund for financial assistance to the States. For details of amounts paid to each State during 1957-58 see page 804.

(viii) *Grants for Road Construction.* (a) *Main Roads Development Act 1923-25, Federal Aid Roads Acts 1926, 1931 and 1936, Federal Aid Roads and Works Act 1937, Commonwealth Aid Roads and Works Act 1947-1949 and Commonwealth Aid Roads Act 1950.* Details of these Acts are given in earlier issues of the Official Year Book (see No. 38, pp. 787-8 and No. 41, p. 62) and in the annual bulletin *Finance, Part I, Public and Private Finance.*

(b) *The Commonwealth Aid Roads Act 1954* repealed the Commonwealth Aid Roads Act 1950 and provided for payment to the States, for a period of five years from 1st July, 1954, of an amount equivalent to 7d. a gallon on all petrol, except aviation spirit, which is entered for home consumption and which is subject to Customs and Excise duties as specified in Customs Tariff Items 229c and 229d(2) and Excise Tariff Item 11. Out of this amount, the following grants are to be made to the States for construction and maintenance of roads and the purchase of roadmaking plant:—

(a) Sixty per cent. of the amount, less £900,000 per annum, for expenditure on roads, and

(b) Forty per cent. of the amount for expenditure on roads in rural areas other than highways, trunk or main roads.

The States may spend from the Commonwealth road grants up to £1,000,000 per annum on works connected with transport by road or water. Five per cent. of the grants is payable to Tasmania and the remainder is to be divided among the other five States, three-fifths according to population and two-fifths according to area. In addition, the Commonwealth may spend each year £800,000 on strategic roads and £100,000 on the promotion of road safety practices.

An amendment to the Commonwealth Aid Roads Act 1954 increased the allocation for road safety purposes from £100,000 to £150,000 a year as from 1st July, 1955 and the allocation to the States from 7d. to 8d. a gallon as from 1st July, 1956.

(c) *The Commonwealth Aid Roads (Special Assistance) Act 1957.* Under the Commonwealth Aid Roads (Special Assistance) Act 1957, a sum of £3,000,000 has been appropriated for each of the years 1957-58 and 1958-59. Of this amount, £2,950,000 is apportioned as assistance to the States:—

(i) for the construction, reconstruction, maintenance and repair of roads or on the purchase of road-making plant; or

(ii) for making payments to local authorities for the construction, reconstruction, maintenance and repair of roads or for the purchase of road-making plant; and £50,000 to the Commonwealth for the construction, reconstruction, maintenance and repair of roads serving Commonwealth purposes or on the purchase of road-making plant.

(ix) *Tuberculosis Act 1948.* Reimbursement of Capital Expenditure. The Tuberculosis Act 1948 provided for the reimbursement by the Commonwealth of capital expenditure incurred by the States in the provision of facilities for the diagnosis, treatment and control of tuberculosis, as from 1st July, 1948.

(x) *States Grants (Mental Institutions) Act 1955.* This Act provides for financial assistance to the States for capital expenditure on mental institutions to a maximum amount of £10,000,000. Each State is entitled to one-third of expenditure on buildings or equipment of a mental institution made on or after 1st July, 1955.

(xi) *Other Payments.* (a) *Price Control Reimbursement.* These grants were made from 1948-49 to 1953-54 to reimburse the States for expenditure incurred in administering prices, rents and land sales controls.

(b) *Western Australian Waterworks.* The Western Australia Grant (Water Supply) Act, 1948, provides for grants to Western Australia not exceeding an aggregate of £2,150,000 for the development of the Agricultural Areas, Great Southern Towns and Goldfields Water Supply schemes. The amount provided by the Commonwealth is not to exceed half the total expenditure on the scheme.

(c) *Coal Mining Industry—Long Service Leave.* To provide funds for the payment for long service leave in the coal mining industry, the Commonwealth imposed an excise duty of 6d. a ton on coal produced from 1st November, 1949. The rate of duty was raised to 7½d. a ton from 26th August, 1951, and to 8d. a ton from 30th May, 1952. The proceeds of this excise duty are paid to a trust fund out of which the States are reimbursed for expenditure incurred in granting long service leave to employees in the coal mining industry.

(d) *Imported Houses.* A subsidy is paid to the States for houses imported by a State or a housing authority of a State after 12th October, 1949. The amount of the subsidy is the amount by which the cost of imported houses exceeds the cost of building comparable houses from local materials. The subsidy is limited to £300 a house and in aggregate to 30,000 houses or £9,000,000.

(e) *Contribution to South Australia—Port Augusta to Port Pirie Railway.* The Port Augusta to Port Pirie Railway Act 1935–1950 approved an agreement between the Commonwealth and South Australia to provide for the extension of the Trans-Australian Railway by the construction of a railway in South Australia from Port Augusta to Port Pirie. As a contribution towards reimbursing South Australia for the cost of the section to be constructed by the State, and for any additional expense incurred by the State in carrying out the Agreement, the Act provided for a payment by the Commonwealth to the State of South Australia of £20,000 per annum for twenty years, the first payment being made in 1937–38 after the opening of the Railway and the final payment in 1956–57.

(f) *Encouragement of Meat Production.* To develop meat production in Queensland and Western Australia, grants are made to these States for the provision and improvement of roads and other facilities for the movement of live-stock. Provision is made for the Commonwealth to meet the cost of the construction and improvement of certain specified roads in both States and the construction of eight cattle loading and unloading points in Queensland. Provision is also made for the Commonwealth to meet half the cost of improving watering facilities on specified stock routes in both States. The amount of the grants for improving watering facilities on stock routes is limited to £75,000 in Queensland and £31,500 in Western Australia. These limits were extended as from 20th April, 1954, to £150,000 in Queensland and £50,000 in Western Australia.

(g) *Grants to Universities.* The States Grants (Universities) Act 1951 provides for grants to be made to the States for the purpose of financial assistance to Universities during the three years 1950–51 to 1952–53. The Act was superseded by the States Grants (Universities) Act 1953 which came into operation on 1st January, 1953, and which increased the amount payable.

(h) *Cattle Tick Control.* Since 1926–27, the Commonwealth has subsidized the cost of eradication and control of cattle tick in New South Wales. From 1950–51, the subsidy was increased on a £1 for £1 basis up to an agreed maximum. The payments are made from the departmental expenditure of the Department of Health.

(i) *Tobacco Industry Assistance.* The Commonwealth makes a grant for tobacco research of up to £15,000 per annum, paid to the tobacco producing States on a £1 for £1 basis.

(j) *Dairy Industry Extension Grant.* The Commonwealth provides financial assistance, with a maximum annual limit of £250,000, to promote improved farm practices in the dairy industry. The grants are charged to the departmental expenditure of the Department of Primary Industry.

(k) *Expansion of Agricultural Advisory Services.* These payments were introduced in 1952–53 to encourage expansion of agricultural advisory services by the State Departments of Agriculture and to promote increased farm efficiency. The payments are charged to the departmental expenditure of the Department of Primary Industry.

(l) *Grants for Railway Standardization.* (i) *South Australia.* Under the Railway Standardization (South Australia) Agreement Act 1949, the Commonwealth is providing funds for the conversion of lines in the south-eastern division of the State as an initial step towards eventual standardization on 4' 8½" gauge. The State is to repay three-tenths of the cost of this work over a period of 50 years and is to bear the full cost of subsequent conversion from broad to standard gauge.

(ii) *Albury to Melbourne.* Under the Railway Standardization (New South Wales and Victoria) Agreement Act 1958 the Commonwealth has agreed to provide funds for the construction of a standard gauge rail link between Albury and Melbourne on the basis that the States of Victoria and New South Wales will each bear 15 per cent. of the cost by instalments over a period of 50 years.

The total expenditure on Railway Standardization (the 30 per cent. advances to the States and the 70 per cent. grants to the States), is charged to the Capital Works and Services vote of the Department of Shipping and Transport.

13. **Other Expenditure.**—Expenditure under this item represents the proceeds of special industry taxes and profits from marketing schemes which are paid to trust funds or other authorities for the purposes of the industries concerned. Advance payments in respect of sales of uranium paid to the Atomic Energy Commission are also included.

Information relating to the taxes levied is given in sub-section II.—Revenue, of this section (*see* p. 790). Details of expenditure from the trust funds are given in § 3, Commonwealth Trust Funds. Details of the price stabilization and other assistance schemes for primary industries may be found in Chapter XXII.—Agricultural Production. Details of expenditure from the Consolidated Revenue Fund during the last five years are given in the following table.

**OTHER EXPENDITURE : RECEIPTS AND EXPENDITURE FROM  
COMMONWEALTH CONSOLIDATED REVENUE FUND.**

(£'000.)

Receipts, from—	Expenditure on—	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>Taxes—</b>						
Export Charges ..	Export Control Boards (a)	168	301	414	375	390
Stevedoring Industry Charge ..	Stevedoring Industry Board	1,630	998	973	1,926	3,337
Tobacco Charge ..	Tobacco Industry (b) ..	..	..	5	41	61
Wheat Export Charge ..	Wheat Industry Price Stabilization (c) ..	..	5,063	4,294	..	443
Wheat Tax .. ..	Wheat Research(d) ..	..	784	851	979	185
Wool Tax .. ..	Wool Use Promotion ..	772	..	..	..	1,328
<i>Total</i> .. ..	.. ..	2,570	7,146	6,537	3,321	5,744
<b>Other—</b>						
Advance Payments— Sales of Uranium ..	Atomic Energy Commission ..	2,791	1,082	30	..	..
Australian New Guinea Production Trust Account ..	Papua and New Guinea Copra Fund ..	..	..	836	..	..
Dried Vine Fruits Support Price Agreement— United Kingdom Government ..	Dried Fruits Board ..	..	..	107	147	..
Australian Meat Board— General Meat Account ..	Australian Meat Board— Meat Export Fund ..	..	..	..	..	447
Meat Export Deficiency Payments — United Kingdom Government ..	Australian Meat Board ..	..	..	153	3,254	5,927
Hide and Leather Industries — Moneys paid by Hide and Leather Industries Board ..	Hide and Leather Industries Trust Fund ..	..	5	..	..	..
Australian Wheat Board —Undistributed balances from Wheat Pools ..	Wheat Research(d) ..	..	..	..	..	285
Treaty of Peace with Japan—Article 16 receipts ..	Japanese Assets Distribution Trust Account ..	..	..	..	696	..
Wheat Prices Stabilization Fund ..	Repayment of Wheat Export Charge ..	..	..	..	192	5
Wool Stores—Moneys paid by Wool Realization Commission ..	Australian Wool Bureau ..	730	..	..	..	..
<i>Total</i> .. ..	.. ..	3,521	1,087	1,126	4,289	6,664
<b>Grand Total</b> .. ..	.. ..	6,091	8,233	7,663	7,610	12,408

(a) Paid to Apple and Pear Export Fund, Canned Fruits Export Fund, Dairy Produce Export Fund, Dried Fruits Export Fund, Egg Export Fund and Wine Export Fund. (b) Paid to Tobacco Industry Trust Fund. (c) Paid to Wheat Prices Stabilization Fund. (d) Paid to Wheat Research Fund.

## § 3. Commonwealth Trust Funds.

1. Receipts, Expenditure and Balances, 1956-57 and 1957-58.—The following table shows the opening and closing balances, and receipts and expenditure of some of the more important Trust Funds of the Commonwealth for the years ended 30th June, 1957 and 1958.

**COMMONWEALTH TRUST FUNDS : RECEIPTS, EXPENDITURE AND  
BALANCES, 1956-57 AND 1957-58.  
(£'000.)**

Fund.	Balance at 30th June, 1956.	Year ended 30th June, 1957.		Balance at 30th June, 1957.	Year ended 30th June, 1958.		Balance at 30th June, 1958.
		Receipts.	Expenditure.		Receipts.	Expenditure.	
Australia New Guinea Production ..	5	..	5	..	..	..	..
Canadian Loan .. .. .	6,459	256	27	6,688	320	333	6,675
Coal Mining Industry Long Service Leave .. .. .	1,210	634	360	1,484	658	308	1,834
Coinage .. .. .	3,891	1,808	5,699	1,578	1,578	..	..
Commonwealth Aid Roads .. .. .	3,479	32,219	31,520	4,178	32,614	32,716	4,076
Commonwealth Aid Roads (Supplementary) .. .. .	3,118	..	162	2,956	..	661	2,295
Defence Equipment and Supplies ..	20,000	Dr 19,479	521	..	..	..	..
Defence Forces Retirement Benefits	8,485	3,177	2,431	9,231	3,164	2,283	10,112
Enemy Subjects .. .. .	1,319	Dr. 390	712	217	Dr. 1	146	70
Insurance Deposits .. .. .	5,035	508	262	5,281	556	551	5,286
International Development and Relief .. .. .	338	3,981	4,072	247	363	389	221
Korean Operations Pool .. .. .	10,000	3,293	3,293	10,000	4,129	629	13,500
Lend Lease Settlement .. .. .	1,411	47	129	1,329	55	252	1,132
Loan Consolidation and Investment Reserve .. .. .	161,733	199,914	44,314	317,333	116,013	134,168	299,178
National Debt Sinking Fund .. .. .	238,336	63,673	58,058	243,951	75,813	89,112	230,652
National Welfare .. .. .	193,124	225,861	223,923	195,062	249,443	247,485	197,020
Parliamentary Retiring Allowances	208	71	29	250	75	31	294
Public Trustee and Custodian .. ..	201	67	252	16	76	82	10
Strategic Stores and Equipment Reserve .. .. .	48,637	Dr 46,568	2,069	..	..	..	..
Superannuation .. .. .	44,388	11,056	5,543	49,901	12,578	6,364	56,115
Swiss Loan .. .. .	12,438	556	..	12,994	560	..	13,554
Temple Society .. .. .	428	358	192	594	148	291	451
Tobacco Industry .. .. .	51	174	201	24	166	141	49
War Gratuity .. .. .	158	Dr. 136	22	..	..	..	..
War Service Homes .. .. .	..	31,080	31,080	..	36,115	36,115	..
War Service Homes—Insurance .. ..	343	239	163	419	281	156	544
Wheat Industry Stabilization .. .. .	293	..	..	293	..	Cr. 4	297
Wheat Prices Stabilization .. .. .	9,604	157	..	9,761	825	1,224	9,362
Wheat Research .. .. .	..	..	..	..	507	60	447
Wine Research .. .. .	510	21	60	471	20	65	426
Wool Contributory Charge .. .. .	8	..	8	..	..	..	..
Wool Disposals Profit .. .. .	203	54	15	242	87	10	310
Wool Industry .. .. .	6,714	222	600	6,336	Dr 6,336	..	..
Wool Research .. .. .	..	936	936	..	8,016	1,526	6,490
Other .. .. .	36,263	393,362	404,436	25,189	372,421	369,977	27,633
<b>Total .. .. .</b>	<b>818,390</b>	<b>907,151</b>	<b>821,094</b>	<b>904,447</b>	<b>910,244</b>	<b>926,658</b>	<b>888,033</b>

2. Summary, 1938-39 and 1953-54 to 1957-58.—In the following table, the balances and total receipts and expenditure of the Trust Funds are shown for each of these years.

**COMMONWEALTH TRUST FUNDS.  
(£'000.)**

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Balances brought forward .. .. .	25,609	566,571	647,290	733,398	818,390	904,447
Receipts .. .. .	84,167	764,365	792,431	843,177	907,151	910,244
Expenditure .. .. .	85,550	683,646	706,323	758,185	821,094	926,658
Balance carried forward .. .. .	24,226	647,290	733,398	818,390	904,447	888,033

## § 4. Commonwealth Loan Fund.

Brief historical notes relating to the Commonwealth Loan Fund are given in earlier issues of the Official Year Book (see No. 37, p. 640). In the following table, details are given of the net expenditure from the Commonwealth Loan Fund for the years 1938-39 and 1953-54 to 1957-58 and of the aggregate expenditure to 30th June, 1958. The figures shown represent "net" loan expenditure, i.e., after adjustments have been made for refunds of amounts expended in earlier years.

**COMMONWEALTH NET EXPENDITURE FROM LOAN FUND.**  
(£'000.)

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.	Total to 30th June, 1958.
War Loans—							
Defence and War (1914-18, 1939-45) Services .. .. .		(a)4,199	(a)4,039	(a)7,622	(a)8,019	(a)8,703	2,030,062
Other Loans—							
Capital Works and Services—							
Defence(b) .. .. .	1,912	..	..	..	..	..	8,682
Repatriation Services(b)—							
War Service Homes(b) .. .. .	..	..	..	..	..	..	7,329
Other .. .. .	..	..	..	..	..	..	47
Postmaster-General's Department .. .. .	-1	..	-2	..	-6	-3	40,413
Broadcasting Services .. .. .	..	..	..	..	..	..	104
Railways .. .. .	..	-1	-1	-5	..	-3	13,741
Territories(c) .. .. .	-7	-12	-4	-4	-3	-4	8,709
Other—							
Ships, Yards and Docks .. .. .	-305	..	..	..	..	..	7,694
Civil Aviation .. .. .	..	..	..	..	..	..	213
Immigration .. .. .	..	..	..	..	..	..	1,681
All other works, buildings, etc. .. .. .	-1	..	..	..	..	..	4,224
Other Purposes—							
Assistance to States—							
Farmers Debt Adjustment .. .. .	2,000	..	..	..	..	..	7,967
Housing .. .. .	..	37,200	29,150	33,200	32,150	33,160	305,869
Other .. .. .	-4	..	..	..	..	..	5,976
Wheat Bounty .. .. .	..	..	..	..	..	..	3,430
Emergency Wheat Storage .. .. .	..	..	..	3,182	-60	-30	3,092
Loan Qantas Empire Airways .. .. .	..	..	..	..	3,899	3,311	7,210
Total Capital Works and Services and Other Purposes .. .. .	3,594	37,187	29,143	36,373	35,980	36,431	426,381
International Bank Dollar Loan(d) .. .. .	..	21,468	23,575	19,369	5,367	14,565	130,153
Swiss Loan(e) .. .. .	..	5,792	5,930	..	..	..	11,722
Canadian Loan(f) .. .. .	..	..	..	6,459	..	..	6,459
Grand Total .. .. .	3,594	68,646	62,687	69,823	49,366	59,699	2,604,777

(a) Financial assistance to the States in connexion with War Service Land Settlement. (b) Excludes amounts charged to War Loan Fund. (c) Includes administration and other public buildings, Australian Capital Territory. (d) Payment to National Debt Sinking Fund. See p. 852. (e) Payment to Swiss Loan Trust Account. See p. 851. (f) Payment to Canadian Loan Trust Account. See p. 851.

NOTE.—Minus sign (—) indicates excess of repayments to Loan Fund.

Information relating to the Public Debt of the Commonwealth is given in Division D, Commonwealth and State Public Debt, of this chapter.

## B. STATE FINANCE.

### § 1. General.

1. **Functions of State Governments.**—In comparing the financial returns of the States, allowances must be made for the various functions discharged by the respective Governments, and for local conditions in each case. Direct comparisons of the revenue, expenditure and debt of the individual States are difficult, owing to the fact that functions which in one State are assumed by the Central Government are in another relegated to municipal or semi-governmental bodies which are vested with certain defined borrowing powers and whose financial transactions are not included with those of the Central Government. Care, therefore, is needed in making comparisons, and the particulars contained in this Chapter should be read with those contained in Chapter XIX.—Local Government. In many respects, moreover, the budgets of the Australian Governments differ materially from those of most European countries, owing to the inclusion therein of the revenue and expenditure of departments concerned with rendering public services, such as railways, tramways, water supply, etc., which in other countries are often left to private enterprise.

2. **Accounts of State Governments.**—The various financial transactions of the States are in each case mainly concerned with one or other of three Funds—the Consolidated Revenue Fund, the Trust Fund, and the Loan Fund. All revenue (except certain items paid into special funds) collected by a State is paid into its Consolidated Revenue Fund, from which payments are made under the authority of an annual Appropriation Act passed by the Legislature, or by a permanent appropriation under a special act.

Figures in § 2 following relating to New South Wales represent the transactions of the Consolidated Revenue Fund and the business undertakings included in the annual budget papers. These latter are as follows:—Railways, Tramways and Omnibuses, and Sydney Harbour Trust Section of the Maritime Services Board. Adjustments have been made to the Budget figures, however, in order to eliminate duplications caused by inter-fund payments. Particulars for all other States relate to the transactions of the Consolidated Revenue Fund.

The Trust Fund comprises all moneys held in trust by the Government, and includes such items as superannuation funds, road funds, insurance companies' deposits, etc.

The Loan Fund is debited with all loan moneys raised by the State, and credited with the expenditure therefrom on public works or other purposes.

3. *Inter-relation of Commonwealth and State Finances.*—A statement in some detail, covering the inter-relation of Commonwealth and State Finances during the period from the inception of Federation to the passing of the Financial Agreement Act 1928, was published in Official Year Book No. 22, pages 379–380. Changes in the financial relations between the Commonwealth and States since the passing of the Financial Agreement Act have been described in issues of the Official Year Book from year to year (*see also* pp. 831–833).

## § 2. State Consolidated Revenue Funds.

### I.—Revenue.

#### 1. General.—The principal sources of State revenue are:—

(a) Taxation; (b) The business undertakings controlled by the State Governments; (c) Sale of and rental from crown lands; (d) Payments by Commonwealth Government under the Financial Agreement, Special Grants and Tax Reimbursement Acts, etc.; (e) Interest on advances; and (f) Miscellaneous sources, comprising fines, fees, etc.

Of these sources, that yielding the largest revenue for the States as a whole is the group of business undertakings, the principal contributors being the government railways and tramways. Next in magnitude are Commonwealth payments under the Tax Reimbursement Acts, followed in order by taxation receipts, Commonwealth special financial assistance and special grants, and lands receipts. With the introduction of uniform taxation by the Commonwealth in 1942–43, the States vacated the fields of income and entertainment taxation, and payments by the Commonwealth under the Income and Entertainments Tax Reimbursements Acts and, from 1946–47, under the Tax Reimbursement Act, replaced revenue previously received from those sources. The Commonwealth, however, ceased to impose Entertainments Tax in 1953–54 and in the same year Victoria, Western Australia and Tasmania re-imposed an Entertainments Tax.

2. *Revenue Received.*—The following table shows particulars of the total amounts, and the amounts per head of population, of consolidated revenue received by the several States during the years 1938–39 and 1953–54 to 1957–58.

#### STATE CONSOLIDATED REVENUE.

Year.	N.S.W.(a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
TOTAL REVENUE. (£'000.)							
1938–39	.. 51,099	26,985	19,330	12,304	10,950	3,615	124,283
1953–54	.. 188,692	106,748	69,696	48,376	43,596	13,285	470,393
1954–55	.. 195,438	116,789	73,820	48,684	46,070	14,495	495,296
1955–56	.. 204,399	123,152	75,669	55,352	49,612	17,827	526,011
1956–57	.. 223,829	133,254	85,158	61,561	54,331	18,801	576,934
1957–58	.. 231,510	142,336	87,955	66,342	57,054	19,986	605,183

#### PER HEAD OF POPULATION.

		£ s. d.																				
1938–39	..	18	13	7	14	8	3	19	3	6	20	13	6	23	9	0	15	4	2	17	19	5
1953–54	..	55	8	2	44	1	2	53	11	10	61	11	0	69	2	5	42	18	8	53	2	6
1954–55	..	56	9	10	46	18	9	55	14	0	60	5	10	70	19	10	46	6	3	54	15	6
1955–56	..	57	19	11	48	0	4	55	18	10	66	6	8	74	3	1	55	17	0	56	15	6
1956–57	..	62	7	8	50	9	6	61	13	9	71	9	4	79	7	5	57	12	11	60	17	1
1957–58	..	63	5	8	52	11	6	62	13	7	74	17	7	81	13	6	59	16	5	62	9	5

(a) See § 1, para. 2, above.

3. Sources of Revenue.—(i) *General.* Classifying the revenue of the several States in the manner indicated in para. 1 above, particulars for the years 1956-57 and 1957-58 were as follows:—

## STATE CONSOLIDATED REVENUE: SOURCES, 1956-57.

Source of Revenue.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Total.
<b>TOTAL REVENUE.</b> (£'000.)							
Taxation(b) .. .. .	30,323	25,433	10,199	9,311	4,665	4,030	83,961
Business Undertakings .. .. .	95,836	44,393	35,583	19,484	19,057	..	214,353
Lands .. .. .	5,926	2,701	4,452	527	1,216	441	15,263
Interest, n.e.i. .. .. .	1,280	5,081	2,294	4,611	2,100	3,287	18,653
Commonwealth Grants—							
Tax Reimbursements .. .. .	58,342	40,228	24,367	14,049	12,251	5,385	154,622
Other(c) .. .. .	9,844	7,953	4,311	8,498	11,129	4,406	46,141
Commonwealth National Welfare Fund Payments(d) .. .. .	5,366	850	617	623	477	262	8,195
Miscellaneous .. .. .	16,912	6,615	3,335	4,458	3,436	990	35,746
<b>Total .. .. .</b>	<b>223,829</b>	<b>133,254</b>	<b>85,158</b>	<b>61,561</b>	<b>54,331</b>	<b>18,801</b>	<b>576,934</b>

## PER HEAD OF POPULATION.

	£ s. d.		
Taxation(b) .. .. .	8 9 0	9 12 8	7 7 9
Business Undertakings .. .. .	26 14 2	16 16 4	25 15 6
Lands .. .. .	1 13 0	1 0 6	3 4 6
Interest, n.e.i. .. .. .	0 7 2	1 18 6	1 13 3
Commonwealth Grants—			
Tax Reimbursements .. .. .	16 5 3	15 4 9	17 13 0
Other(c) .. .. .	2 14 11	3 0 3	3 2 5
Commonwealth National Welfare Fund Payments(d) .. .. .	1 9 11	0 6 5	0 9 0
Miscellaneous .. .. .	4 14 3	2 10 1	2 8 4
<b>Total .. .. .</b>	<b>62 7 8</b>	<b>50 9 6</b>	<b>61 13 9</b>

For footnotes see table below.

## STATE CONSOLIDATED REVENUE : SOURCES, 1957-58.

Source of Revenue.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>TOTAL REVENUE.</b> (£'000.)							
Taxation(b) .. .. .	34,736	28,387	10,879	9,772	5,549	3,653	92,976
Business Undertakings .. .. .	91,153	43,775	34,135	20,778	17,751	..	207,592
Lands .. .. .	5,310	2,854	4,619	546	1,258	463	15,050
Interest, n.e.i. .. .. .	1,394	5,075	2,554	5,094	2,436	3,622	20,175
Commonwealth Grants—							
Tax Reimbursement .. .. .	61,721	43,996	25,919	15,258	13,061	5,864	165,819
Other(c) .. .. .	14,431	9,594	6,297	9,495	12,842	4,912	57,571
Commonwealth National Welfare Fund Payments(d) .. .. .	5,316	1,313	4	725	454	273	8,085
Miscellaneous .. .. .	17,449	7,342	3,548	4,674	3,703	1,199	37,915
<b>Total .. .. .</b>	<b>231,510</b>	<b>142,336</b>	<b>87,955</b>	<b>66,342</b>	<b>57,054</b>	<b>19,986</b>	<b>605,183</b>

## PER HEAD OF POPULATION.

	£ s. d.		
Taxation(b) .. .. .	9 10 0	10 9 9	7 15 1
Business Undertakings .. .. .	24 18 4	16 3 5	24 6 6
Lands .. .. .	1 9 0	1 3 0	3 5 11
Interest, n.e.i. .. .. .	0 7 7	1 17 6	1 16 5
Commonwealth Grants—			
Tax Reimbursements .. .. .	16 17 5	16 5 0	18 9 5
Other(c) .. .. .	3 18 11	3 10 11	4 9 7
Commonwealth National Welfare Fund Payments(d) .. .. .	1 9 1	0 9 8	0 0 1
Miscellaneous .. .. .	4 15 4	1 17 6	2 10 7
<b>Total .. .. .</b>	<b>63 5 8</b>	<b>52 11 6</b>	<b>62 13 7</b>

(a) See § 1, para. 2, p. 814. (b) In all States certain taxation collections are not paid into Consolidated Revenue Fund. For total collections see next page. (c) Includes payments under Financial Agreement, Special Grants, Special Financial Assistance, Grants to Universities, etc. (d) Consolidated Revenue Fund receipts only. Excludes payments to Trust Funds.

(ii) *Revenue from Taxation.* (a) *General.* The following tables show, for the years 1956-57 and 1957-58, particulars of all State taxation collections irrespective of whether such moneys have been paid into the Consolidated Revenue Funds or not. For this reason, the particulars hereunder differ from those shown in the tables relating to the Consolidated Revenue Funds and represent a comprehensive statement of all taxation collections by the

Government in each State. In this and the succeeding statements of taxation, the collections have been grouped according to the nature of the tax rather than the method of collection. For example, stamp duties on betting tickets and bookmakers' licences have been included under "Racing Tax" instead of under "Stamp Duties" and "Licences" respectively. Commonwealth payments under the State Grants (Tax Reimbursement) Act are not included.

**STATE REVENUE FROM TAXATION: TOTAL NET COLLECTIONS(a) 1956-57.**

(£'000.)

Tax.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>Motor Taxes—</i>							
Registration Fees and Taxes .. .. .	9,792	6,240	4,609	3,252	1,585	853	26,331
Drivers', etc., Licences .. .. .	1,106	416	(b) 152	335	134	47	2,190
Other .. .. .	1,210	2,534	957	83	92	142	5,018
<i>Total Motor</i> .. .. .	<i>12,108</i>	<i>9,190</i>	<i>5,718</i>	<i>3,670</i>	<i>1,811</i>	<i>1,042</i>	<i>33,539</i>
Probate and Succession Duties .. .. .	10,891	7,005	2,914	1,872	1,011	684	24,377
Stamp Duties, n.e.i. .. .. .	9,904	5,249	2,994	1,351	1,250	588	21,336
Land .. .. .	3,348	4,170	1,428	1,401	1,108	371	11,826
Income (Arrears) .. .. .	10	9	2	1	1		23
Liquor .. .. .	3,123	2,515	852	130	367	233	7,220
Lotteries .. .. .		2,979	305			1,049	4,333
Racing .. .. .	2,903	2,179	301	1,163	595	354	7,495
Entertainments .. .. .		1,406			272	160	1,838
Poker Machines Licence Fees .. .. .	764						764
Licences, n.e.i. .. .. .	144	258	194	63	44	6	709
Other .. .. .			958	83	34		1,075
<b>Grand Total</b> .. .. .	<b>43,195</b>	<b>34,960</b>	<b>15,666</b>	<b>9,734</b>	<b>6,493</b>	<b>4,487</b>	<b>114,535</b>

For footnotes see table below.

**STATE REVENUE FROM TAXATION: TOTAL NET COLLECTIONS(a) 1957-58.**

(£'000.)

Tax.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>Motor Taxes—</i>							
Registration Fees and Taxes .. .. .	10,308	7,953	4,798	3,337	1,984	1,012	29,392
Drivers', etc., Licences .. .. .	1,189	439	(b) 160	341	143	69	2,346
Other .. .. .	1,484	2,975	1,005	82	93	143	5,782
<i>Total Motor</i> .. .. .	<i>12,981</i>	<i>11,367</i>	<i>5,963</i>	<i>3,760</i>	<i>2,225</i>	<i>1,224</i>	<i>37,520</i>
Probate and Succession Duties .. .. .	10,756	8,065	3,138	2,059	1,090	572	25,680
Stamp Duties, n.e.i. .. .. .	11,387	6,253	3,295	1,514	1,416	662	24,527
Land .. .. .	6,002	4,607	1,468	1,390	1,522	407	15,396
Income (Arrears) .. .. .	25	3	2	1	2		33
Liquor .. .. .	3,460	2,818	965	188	423	241	8,095
Lotteries .. .. .		2,835	337			430	3,602
Racing .. .. .	2,953	2,385	328	1,113	719	372	7,870
Entertainments .. .. .		1,525			285	172	1,982
Poker Machines Licence Fees .. .. .	835						835
Licences, n.e.i. .. .. .	153	253	224	67	62	6	765
Other .. .. .			1,651	81	17		1,749
<b>Grand Total</b> .. .. .	<b>48,552</b>	<b>40,111</b>	<b>17,371</b>	<b>10,173</b>	<b>7,761</b>	<b>4,086</b>	<b>128,054</b>

(a) From all sources of taxation irrespective of whether paid to Consolidated Revenue or to other funds.

(b) As from October, 1952 no charge has been made for drivers' licences. Instead an annual driving fee is charged upon registration of a vehicle.



## STATE REVENUE FROM TAXATION : PROPORTIONS OF INDIVIDUAL TAXES TO TOTAL, 1957-58.

(Per Cent.)

Tax.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Motor .. .. .	26.74	28.34	34.33	36.96	28.67	29.96	29.30
Probate and Succession Duties .. .. .	22.15	20.11	18.06	20.24	14.04	14.00	20.05
Stamp Duties, n.e.i. .. .. .	23.45	15.59	18.97	14.88	18.25	16.20	19.15
Land .. .. .	12.36	11.49	8.45	13.66	19.61	9.96	12.02
Income (Arrears) .. .. .	0.05	0.01	0.01	0.01	0.03	..	0.03
Liquor .. .. .	7.13	7.02	5.56	1.85	5.45	5.90	6.32
Lotteries .. .. .	..	7.07	1.94	..	..	10.52	2.81
Racing .. .. .	6.08	5.94	1.89	10.94	9.26	9.10	6.15
Entertainments .. .. .	..	3.80	..	..	3.67	4.21	1.55
Poker Machines Licence Fees .. .. .	1.72	..	..	..	..	..	0.65
Licences, n.e.i. .. .. .	0.32	0.63	1.29	0.66	0.80	0.15	0.60
Other .. .. .	..	..	9.50	0.80	0.22	..	1.37
<b>Grand Total .. .. .</b>	<b>100.00</b>						

(b) 1938-39 and 1953-54 to 1957-58. Prior to federation, customs and excise duties were the principal source of revenue from taxation. Thereafter, until the introduction of the uniform income tax scheme in 1942-43, the most productive State taxes were the various income taxes which, in 1941-42, included unemployment relief, State development and hospital taxes. Since 1941-42, the States have been reimbursed by the Commonwealth for the revenue lost by the discontinuance of these taxes. Details of the reimbursement grants are given on pages 804 and 815. Information relating to the State income taxes which were levied prior to 1942-43 may be found in earlier issues of the Official Year Book.

The total amounts and the amounts per head raised from all sources of taxation by the several State Governments, including amounts not paid into the Consolidated Revenue Fund, during the years 1938-39 and 1953-54 to 1957-58 are shown in the following table:—

## STATE REVENUE FROM TAXATION : TOTAL NET COLLECTIONS.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>TOTAL NET COLLECTIONS.</b>							
(£'000.)							
1938-39(b) ..	20,263	12,023	8,657	4,199	3,597	1,779	50,518
1953-54 ..	29,749	22,300	12,817	6,911	4,682	3,941	80,400
1954-55 ..	32,079	27,497	13,644	7,920	5,210	3,136	89,486
1955-56 ..	34,931	30,004	14,724	8,497	5,670	4,175	98,001
1956-57 ..	43,195	34,960	15,666	9,734	6,493	4,487	114,535
1957-58 ..	48,552	40,111	17,371	10,173	7,761	4,086	128,054

## PER HEAD OF POPULATION.

(£ s. d.)

1938-39(b) ..	7 8 2	6 8 5	8 11 6	7 1 1	7 14 1	7 9 8	7 6 1
1953-54 ..	8 14 9	9 4 1	9 17 1	8 15 10	7 8 5	12 14 9	9 1 7
1954-55 ..	9 5 5	11 1 1	10 5 11	9 16 2	8 0 7	10 0 4	9 17 11
1955-56 ..	9 18 3	11 14 0	10 17 8	10 3 7	8 9 6	13 1 7	10 11 7
1956-57 ..	12 0 9	13 4 10	11 7 0	11 6 0	9 9 9	13 15 2	12 1 8
1957-58 ..	13 5 5	14 16 4	12 7 7	11 9 8	11 2 3	12 4 7	13 4 4

(a) Excluding Commonwealth Tax Reimbursements.

(b) Includes Income Taxes.

The following table shows for the years 1938-39 and 1953-54 to 1957-58 the aggregate amounts collected by the several State Governments, under the various forms of State taxation and includes amounts paid to funds other than Consolidated Revenue.

**STATE REVENUE FROM TAXATION : TOTAL NET COLLECTIONS.(a)**  
(£'000.)

Tax.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Motor .. .. .	6,961	25,877	27,783	28,919	33,539	37,520
Probate and Succession Duties	5,000	18,700	21,602	23,388	24,377	25,680
Stamp Duties, n.e.i. .. .	3,466	14,543	16,027	18,181	21,336	24,527
Land .. .. .	1,408	4,138	4,998	5,969	11,826	15,396
Income Taxes .. .. .	29,796	(b) 92	(b) 52	(b) 74	(b) 23	(b) 33
Liquor .. .. .	1,045	5,346	5,563	6,617	7,220	8,095
Lotteries .. .. .	532	1,804	3,478	4,256	4,333	3,602
Racing .. .. .	1,251	7,503	6,992	7,430	7,495	7,870
Entertainments .. .. .	633	906	1,341	1,446	1,838	1,982
Poker Machines Licence Fees	..	..	..	..	764	835
Licences and all other .. .	426	1,491	1,650	1,721	1,784	2,514
<b>Total .. .. .</b>	<b>50,518</b>	<b>80,400</b>	<b>89,486</b>	<b>98,001</b>	<b>114,535</b>	<b>128,054</b>

(a) From all sources of taxation irrespective of whether paid to Consolidated Revenue or to other funds. Excludes Commonwealth Tax Reimbursements. (b) Arrears of State income taxes.

Details of taxation collections paid into special funds and included in the above table are shown below:—

**STATE REVENUE FROM TAXATION : PAYMENTS INTO SPECIAL FUNDS.**  
(£'000.)

Tax.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Unemployment Relief .. .	1,119	..	..	..	..	..
Hospital .. .. .	264	..	..	..	..	..
Motor .. .. .	5,858	20,774	22,879	23,718	27,803	31,593
Stamp Duties, n.e.i. .. .	..	155	181	180	190	188
Land .. .. .	..	..	..	..	100	100
Liquor .. .. .	92	185	208	135	193	219
Lotteries .. .. .	..	..	..	101	82	60
Racing .. .. .	83	554	549	596	596	573
Poker Machines Licence Fees	..	..	..	..	764	835
Other .. .. .	173	765	847	864	846	1,510
<b>Total .. .. .</b>	<b>7,589</b>	<b>22,433</b>	<b>24,664</b>	<b>25,594</b>	<b>30,574</b>	<b>35,078</b>

(iii) *Business Undertakings.* (a) 1956-57 and 1957-58. A very large proportion of State gross revenue is made up of receipts from business undertakings under the control of the Governments. The most important of these are railways and tramways, harbour works, water supply and sewerage, and electricity supply and, in addition, State batteries for the treatment of auriferous ores in Western Australia and various minor revenue-producing services rendered by the Governments of all States are included. For the year 1956-57, the revenue from these sources was £214,353,000 or 37.1 per cent. of the revenue from all sources and in 1957-58, £207,592,000 or 34.3 per cent. of the revenue from all sources. Details of revenue are as follows:—

**STATE REVENUE FROM BUSINESS UNDERTAKINGS, 1956-57.**  
(£'000.)

Source.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Total.
Railways(b) .. .. .	78,689	(c)37,463	35,583	13,377	14,374	..	179,486
Tramways and Omnibuses	14,260	..	..	..	1,007	..	15,267
Harbours, Rivers, Lights ..	2,887	(d) 503	..	2,121	321	..	5,832
Water Supply, Sewerage, Irrigation and Drainage..	..	3,186	..	3,820	2,897	..	9,903
Electricity Supply .. .. .	..	2,216	..	..	..	..	2,216
Other .. .. .	..	1,025	..	166	458	..	1,649
<b>Total .. .. .</b>	<b>95,836</b>	<b>44,393</b>	<b>35,583</b>	<b>19,484</b>	<b>19,057</b>	<b>..</b>	<b>214,353</b>

(a) Tasmanian transport services are under the separate control of the Transport Commission. (b) The following contributions to Railways revenue from Consolidated Revenue Fund are excluded—New South Wales, £1,000,000; South Australia, £4,200,000. (c) Includes electric tramways operated by the Railways Department. (d) Includes Harbour Trust Fund contribution £372,000.

**STATE REVENUE FROM BUSINESS UNDERTAKINGS, 1957-58.**  
(£'000.)

Source.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Total.
Railways(b)	74,432	(c)35,948	34,135	13,648	12,849	..	171,012
Tramways and Omnibuses	13,821	..	..	..	984	..	14,805
Harbours, Rivers, Lights	2,900	(d) 543	..	2,121	397	..	5,961
Water Supply, Sewerage, Irrigation and Drainage	..	3,893	..	4,798	3,144	..	11,835
Electricity Supply	..	2,431	..	..	..	..	2,431
Other	..	960	..	211	377	..	1,548
<b>Total</b>	<b>91,153</b>	<b>43,775</b>	<b>34,135</b>	<b>20,778</b>	<b>17,751</b>	<b>..</b>	<b>207,592</b>

(a) Tasmanian transport services are under the separate control of the Transport Commission. (b) The following contributions to Railways revenue from Consolidated Revenue Fund are excluded—New South Wales, £1,000,000; South Australia, £4,300,000. (c) Includes electric tramways operated by the Railways Department. (d) Includes Harbour Trust Fund contribution, £399,000.

(b) 1938-39 and 1953-54 to 1957-58. The total revenue from business undertakings and the revenue per head in each State are shown in the following table:—

**STATE REVENUE FROM BUSINESS UNDERTAKINGS.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>TOTAL REVENUE.</b> (£'000.)							
1938-39	24,676	11,649	7,642	4,937	5,633	(a) 511	55,048
1953-54	88,616	41,163	28,952	16,733	15,271	..	190,735
1954-55	87,929	44,021	30,805	17,807	16,695	..	197,257
1955-56	89,496	44,160	30,404	18,435	17,405	..	199,900
1956-57	95,836	44,393	35,583	19,484	19,057	..	214,353
1957-58	91,153	43,775	34,135	20,778	17,751	..	207,592

**PER HEAD OF POPULATION.**  
(£ s. d.)

1938-39	9 0 5	6 2 6	7 11 7	8 5 10	12 1 4	(a)2 3 0	7 19 2
1953-54	26 0 5	16 19 10	22 5 3	21 5 10	24 4 3	..	21 10 10
1954-55	25 8 4	17 13 10	23 4 10	22 1 1	25 14 7	..	21 16 4
1955-56	25 7 10	17 4 4	22 9 7	22 1 10	26 0 4	..	21 11 6
1956-57	26 14 2	16 16 4	25 15 6	22 12 5	27 16 9	..	22 12 2
1957-58	24 18 4	16 3 5	24 6 6	23 9 1	25 8 3	..	21 8 7

(a) Includes Tasmanian transport services which were subsequently placed under the control of the Transport Commission.

In the table below, particulars of total State revenue from business undertakings for the various types of undertakings are shown for the years 1938-39 and 1953-54 to 1957-58:—

**STATE REVENUE FROM BUSINESS UNDERTAKINGS.**  
(£'000.)

Source.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Railways, Tramways and Omnibuses	48,134	176,127	179,878	181,185	194,753	185,817
Harbour Services	2,357	4,782	5,887	5,833	5,832	5,961
Water Supply, Sewerage, Irrigation and Drainage	2,543	6,535	7,872	8,997	9,903	11,835
Other	2,014	3,291	3,620	3,885	3,865	3,979
<b>Total</b>	<b>55,048</b>	<b>190,735</b>	<b>197,257</b>	<b>199,900</b>	<b>214,353</b>	<b>207,592</b>

(iv) *Lands.* The revenue from the sale and rental of Crown lands has, with few exceptions, been treated from the earliest times as forming part of the Consolidated Revenue Funds, and has been applied to meet ordinary expenses. The following table shows the revenue from sales and rentals of Crown lands for the year 1956-57 and 1957-58.

STATE LAND REVENUE 1956-57.  
(£'000.)

Source.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Sales ..	190	169	..	36	39	14	448
Conditional Purchases ..	235	..	..	3	116	..	354
Rentals(a) ..	4,117	59	2,916	488	189	26	7,795
Forestry ..	1,311	2,294	1,383	..	872	390	6,250
Other ..	73	405	153	..	..	11	642
<b>Total ..</b>	<b>5,926</b>	<b>2,927</b>	<b>4,452</b>	<b>527</b>	<b>1,216</b>	<b>441</b>	<b>15,489</b>

(a) Including mining royalties, rents, etc.

STATE LAND REVENUE, 1957-58.  
(£'000.)

Source.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Sales ..	247	111	..	70	63	18	509
Conditional Purchases ..	210	..	..	3	114	..	327
Rentals(a) ..	3,497	158	3,029	199	186	27	7,096
Forestry ..	1,277	2,227	1,397	..	895	409	6,205
Other ..	79	358	193	274	..	9	913
<b>Total ..</b>	<b>5,310</b>	<b>2,854</b>	<b>4,619</b>	<b>546</b>	<b>1,258</b>	<b>463</b>	<b>15,050</b>

(a) Includes mining royalties, rents, etc.

The total land revenue for all States for the years 1938-39 and 1953-54 to 1957-58 respectively was:—£4,144,000, £11,880,000, £12,787,000, £13,937,000, £15,489,000 and £15,050,000.

(v) *Commonwealth Grants.* Commonwealth grants to the States represent a considerable proportion of the States' Revenue. In 1956-57, the total amount (excluding sundry minor items) paid to the Consolidated Revenue Funds of the States was £201,438,000 (34.9 per cent.) and in 1957-58, £223,390,000 (36.9 per cent.). Details for 1956-57 and 1957-58 were as follows—Contribution towards interest on States' debts under the Financial Agreement, £7,585,000, £7,585,000, special grants to the States of South Australia, Western Australia and Tasmania, £18,500,000, £19,500,000, special financial assistance, £19,405,000, £29,145,000, tax reimbursement grants, £154,622,000, £165,819,000, grants to Universities, £581,000, £714,000 and other grants, £745,000, £625,000.

In addition to these, the States receive a number of other grants which are paid to trust funds. The main items in this class are the contribution to the sinking fund on States' debts (£4,640,000 and £5,065,000 in 1956-57 and 1957-58) paid to the National Debt Sinking Fund and grants for Commonwealth Aid Roads (£31,269,000 and £34,614,000 in 1956-57 and 1957-58) paid to State trust funds.

More detailed information concerning Commonwealth grants to the States is given on pages 803-811.

(vi) *Commonwealth National Welfare Fund Payments.* The States also receive payments from the Commonwealth in respect of Hospital and Pharmaceutical Benefits, Nutrition of Children and reimbursement of maintenance expenditure on Tuberculosis Sanatoria. These receipts are paid into Consolidated Revenue Funds or Trust Funds according to the varying accounting procedures in the States. In 1956-57, the total amount paid to State Consolidated Revenue Funds was £8,195,000 (1.4 per cent.) and in 1957-58 £8,085,000 (1.3 per cent.). These amounts were made up of Hospital Benefits, £2,457,000, £2,212,000; Pharmaceutical Benefits, £581,000, £623,000; Nutrition of Children, £1,094,000, £1,140,000; and Tuberculosis—Reimbursement of maintenance expenditure, £4,063,000, £4,120,000.

(vii) *Interest and Miscellaneous.* In addition to the foregoing, there are in each State several miscellaneous sources of revenue, including such items as interest, fines, fees, etc. Interest, mainly from loans to local governing bodies, on public account balances and for soldier land settlement amounted to £18,653,000 in 1956-57 and to £20,175,000 in 1957-58, whilst "Miscellaneous" revenue, which includes fines of the courts and fees for services, amounted to £34,845,000 in 1956-57 and to £37,915,000 in 1957-58.

## II.—Expenditure.

1. *General.*—The principal heads of State expenditure from Consolidated Revenue Funds are:—

(a) Interest, exchange and debt redemption charges in connexion with public debt; (b) Working expenses of business undertakings; (c) Education; (d) Health and charitable expenditure; (e) Justice; (f) Police; (g) Penal establishments; and (h) All other expenditure, under which heading are included public works, lands and surveys, agriculture and forestry, legislative and general administration, pensions and miscellaneous.

In earlier years, the working expenses of railways and tramways were the most important item of State Government expenditure but, for a period prior to 1941-42, public debt charges were the heaviest item. Since then, however, railways and tramways expenditure has again taken the major place. In the years 1956-57 and 1957-58, the working expenses of the railways, tramways and omnibuses were 32.9 per cent. and 30.2 per cent. respectively of the total expenditure from the State Consolidated Revenue Funds; next in importance were education, 16.4 per cent and 17.1 per cent.; public debt charges, 14.8 per cent. and 15.9 per cent.; charitable, public health and hospitals, 13.5 per cent. and 13.8 per cent.; and law, order and public safety, 5.6 per cent. and 5.7 per cent. respectively.

2. *Total Expenditure.*—The total expenditure from the Consolidated Revenue Funds of the several States and the expenditure per head of population during each of the years 1938-39 and 1953-54 to 1957-58 are shown in the following table:—

### STATE EXPENDITURE: CONSOLIDATED REVENUE FUNDS.

Year.	N.S.W.(a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
TOTAL EXPENDITURE. (£'000.)							
1938-39 ..	53,558	27,773	19,316	12,701	11,170	3,641	128,159
1953-54 ..	188,564	106,037	69,353	46,566	43,699	13,270	467,489
1954-55 ..	197,586	115,453	73,602	50,918	46,554	14,707	498,820
1955-56 ..	211,232	126,398	77,392	56,782	51,443	17,712	540,959
1956-57 ..	223,700	137,565	85,142	61,610	56,243	19,615	583,875
1957-58 ..	231,464	145,549	89,470	66,742	58,177	20,798	612,200

### PER HEAD OF POPULATION.

(£ s. d.)

1938-39 ..	19 11 7	14 16 8	19 3 3	21 6 10	23 18 5	15 6 5	18 10 8
1953-54 ..	55 7 5	43 15 4	53 6 7	59 4 11	69 5 8	42 17 9	52 15 11
1954-55 ..	57 2 3	46 8 0	55 10 8	63 1 2	71 14 9	46 19 9	55 3 4
1955-56 ..	59 18 8	49 5 7	57 4 4	68 0 11	76 17 10	55 9 10	58 7 10
1956-57 ..	62 6 11	52 2 1	61 13 6	71 10 6	82 3 4	60 2 10	61 11 9
1957-58 ..	63 5 5	53 15 3	63 15 2	75 6 7	83 5 8	62 5 0	63 3 11

(a) See § 1, para. 2, page 814.

3. Details of Expenditure.—(i) 1956-57 and 1957-58. The following tables show the total expenditure and expenditure per head of population for each of the principal items:—

## STATE EXPENDITURE: DETAILS, 1956-57.

Particulars.	N.S.W.(a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(b)	Total.
TOTAL EXPENDITURE.							
(£'000.)							
Public Debt (interest, exchange, debt redemption, etc.) .. .. .	26,003	21,080	11,959	13,153	8,893	5,605	86,693
Railways .. .. .	70,898	37,154	36,738	14,982	16,934	..	176,706
Tramways and Omnibuses .. .. .	13,981	..	..	..	1,234	..	15,215
Harbours and Rivers, etc. .. .. .	2,065	494	..	1,314	486	..	4,359
Water Supply, Sewerage, Irrigation and Drainage .. .. .	..	3,017	..	2,922	2,454	..	8,393
Other Business and Industrial Undertakings .. .. .	..	1,117	..	178	1,560	1,295	4,150
Education .. .. .	37,835	26,007	11,351	8,165	8,062	4,267	95,687
Health and Charitable .. .. .	28,474	22,912	10,947	6,732	6,494	3,074	78,633
Justice .. .. .	2,859	1,701	897	397	494	251	6,599
Police .. .. .	7,503	5,899	3,377	1,517	1,602	823	20,721
Penal establishments .. .. .	1,887	831	276	382	266	137	3,779
Public Safety .. .. .	413	44	299	780	103	55	1,694
Adjustment of surplus of previous year(c) .. .. .	..	..	..	40	98	-157	-19
All other expenditure .. .. .	31,782	17,309	9,298	11,048	7,563	4,265	81,265
<b>Total .. .. .</b>	<b>223,700</b>	<b>137,565</b>	<b>85,142</b>	<b>61,610</b>	<b>56,243</b>	<b>19,615</b>	<b>583,875</b>

(a) See § 1, para. 2, page 814. (b) Tasmanian Transport Services are under the separate control of the Transport Commission. (c) Balance of Special Grant 1954-55. The special Grant for 1956-57 taken into Tasmanian Consolidated Revenue Fund was £3,657,000 although the Commonwealth payment was £3,500,000. The difference was offset in the Tasmanian accounts against the adjusted surplus for 1954-55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
PER HEAD OF POPULATION.							
(£ s. d.)							
Public Debt (interest, exchange, debt redemption, etc.) .. .. .	7 4 11	7 19 8	8 13 3	15 5 5	12 19 10	17 3 9	9 2 11
Railways .. .. .	19 15 2	14 1 5	26 12 3	17 7 11	24 14 9	..	18 12 9
Tramways and Omnibuses .. .. .	3 17 11	..	..	..	1 16 1	..	1 12 1
Harbours and Rivers, etc. .. .. .	0 11 6	0 3 9	..	1 10 6	0 14 2	..	0 9 2
Water Supply, Sewerage, Irrigation and Drainage .. .. .	..	1 2 10	..	3 7 10	3 11 9	..	0 17 9
Other Business and Industrial Undertakings .. .. .	..	0 8 6	..	0 4 2	2 5 7	3 19 5	0 8 9
Education .. .. .	10 10 11	9 17 0	8 4 5	9 9 7	11 15 7	13 1 8	10 1 10
Health and Charitable .. .. .	7 18 9	8 13 7	7 18 7	7 16 4	9 9 9	9 8 6	8 5 11
Justice .. .. .	0 15 11	0 12 11	0 13 0	0 9 2	0 14 5	0 15 5	0 13 11
Police .. .. .	2 1 10	2 4 8	2 8 11	1 15 3	2 6 10	2 10 6	2 3 9
Penal Establishments .. .. .	0 10 6	0 6 4	0 4 0	0 8 10	0 7 9	0 8 5	0 8 0
Public Safety .. .. .	0 2 4	0 0 4	0 4 4	0 18 1	0 3 0	0 3 4	0 3 7
Adjustment of surplus of previous years .. .. .	..	..	..	0 0 11	0 2 10	-0 9 8	-0 0 1
All other expenditure .. .. .	8 17 2	6 11 1	6 14 9	12 16 6	11 1 0	13 1 6	8 11 5
<b>Total .. .. .</b>	<b>62 6 11</b>	<b>52 2 1</b>	<b>61 13 6</b>	<b>71 10 6</b>	<b>82 3 4</b>	<b>60 2 10</b>	<b>61 11 9</b>

## STATE EXPENDITURE: DETAILS, 1957-58.

Particulars.	N.S.W.(a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(b)	Total.
<b>TOTAL EXPENDITURE.</b>							
(£'000.)							
Public Debt (interest, exchange, debt redemption, etc.) .. .. .	28,571	23,919	13,436	14,596	10,066	6,535	97,123
Railways .. .. .	67,584	35,932	35,757	14,944	15,904	..	170,121
Tramways and Omnibuses .. .. .	13,720	..	..	..	1,242	..	14,962
Harbours and Rivers, etc. .. .. .	2,126	568	..	1,340	503	..	4,537
Water Supply, Sewerage, Irrigation and Drainage .. .. .	..	3,268	..	3,688	2,542	..	9,498
Other Business and Industrial Undertakings .. .. .	..	986	765	215	1,198	1,537	4,701
Education .. .. .	41,173	28,680	12,339	9,128	9,020	4,362	104,702
Health and Charitable .. .. .	30,243	24,915	11,738	7,080	7,267	3,206	84,449
Justice .. .. .	3,086	1,898	938	417	493	267	7,099
Police .. .. .	8,078	6,426	3,522	1,703	1,712	835	22,276
Penal establishments .. .. .	1,994	907	315	421	301	146	4,084
Public Safety .. .. .	471	44	271	158	121	53	1,118
Adjustment of surplus of previous years(c)	..	..	..	842	322	-816	348
All other expenditure .. .. .	34,418	18,006	10,389	12,210	7,486	4,673	87,182
<b>Total .. .. .</b>	<b>231,464</b>	<b>145,549</b>	<b>89,470</b>	<b>66,742</b>	<b>58,177</b>	<b>20,798</b>	<b>612,200</b>

(a) See § 1, para. 2, page 814.

(b) Tasmanian transport services are under the separate control of the Transport Commission.

(c) Balance of Special Grant, 1955-56. The Special Grant for 1957-58 taken into Tasmanian Consolidated Revenue Fund was £4,466,000, although the Commonwealth payment was £3,650,000. The difference was offset in the Tasmanian accounts against the adjusted surplus for 1955-56.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>PER HEAD OF POPULATION.</b>							
(£ s. d.)							
Public Debt (interest, exchange, debt redemption, etc.) .. .. .	7 16 2	8 16 9	9 11 6	16 9 6	14 8 5	19 11 2	10 0 6
Railways .. .. .	18 9 6	13 5 6	25 9 7	16 17 4	22 15 4	..	17 11 3
Tramways and Omnibuses .. .. .	3 15 0	..	..	..	1 15 6	..	1 10 11
Harbours and Rivers, etc. .. .. .	0 11 8	0 4 2	..	1 10 3	0 14 5	..	0 9 4
Water Supply, Sewerage, Irrigation and Drainage .. .. .	..	1 4 2	..	4 3 3	3 12 9	..	0 19 7
Other Business and Industrial Undertakings .. .. .	..	0 7 3	0 10 11	0 4 10	1 14 3	4 12 0	0 9 8
Education .. .. .	11 5 1	10 12 0	8 15 10	10 6 1	12 18 3	13 1 1	10 16 2
Health and Charitable .. .. .	8 5 4	9 4 1	8 7 4	7 19 10	10 8 1	9 11 11	8 14 4
Justice .. .. .	0 16 10	0 14 0	0 13 5	0 9 5	0 14 1	0 16 0	0 14 8
Police .. .. .	2 4 2	2 7 3	2 10 2	1 18 5	2 9 0	2 10 0	2 6 0
Penal establishments .. .. .	0 10 11	0 6 9	0 4 6	0 9 6	0 8 7	0 8 9	0 8 5
Public safety .. .. .	0 2 7	0 0 4	0 3 10	0 3 7	0 3 5	0 3 2	0 2 4
Adjustment of surplus of previous years .. .. .	..	..	..	0 19 0	0 9 3	-2 8 10	0 0 9
All other expenditure .. .. .	9 8 2	6 13 0	7 8 1	13 15 7	10 14 4	13 19 9	9 0 0
<b>Total .. .. .</b>	<b>63 5 5</b>	<b>53 15 3</b>	<b>63 15 2</b>	<b>75 6 7</b>	<b>83 5 8</b>	<b>62 5 0</b>	<b>63 3 11</b>

(ii) 1938-39 and 1953-54 to 1957-58. Combined expenditure by the several States for these years on each of the principal items is shown in the following table.

**STATE EXPENDITURE.**  
(£'000.)

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Public Debt (interest, exchange, debt redemption, etc.) ..	40,158	61,225	70,394	79,540	86,693	97,123
Railways, Tramways and Omnibuses (working expenses) ..	38,138	170,209	173,915	185,236	191,921	185,083
Harbours and Rivers, etc. ..	680	3,916	4,444	4,421	4,359	4,537
Water Supply, Sewerage, Irrigation and Drainage ..	1,076	6,438	7,051	7,650	8,393	9,498
Other Business and Industrial Undertakings .. ..	1,035	3,522	3,554	3,494	4,150	4,701
Education .. ..	12,639	67,162	76,249	87,110	95,687	104,702
Health and Charitable ..	15,307	60,672	67,338	70,888	78,633	84,449
Justice .. ..	1,323	5,071	5,349	6,031	6,599	7,099
Police .. ..	3,733	15,688	16,679	18,788	20,721	22,276
Penal establishments ..	646	2,747	2,928	3,207	3,779	4,084
Public Safety .. ..	297	867	852	930	1,694	1,118
Reduction of previous deficits or adjustment of surpluses ..	..	300	-250	-159	-19	348
All other expenditure ..	13,127	69,672	70,317	73,823	81,265	87,182
<b>Total .. ..</b>	<b>128,159</b>	<b>467,489</b>	<b>498,820</b>	<b>540,959</b>	<b>583,875</b>	<b>612,200</b>

**Division III.—Surplus Revenue.**

The following table shows for each of the years 1938-39 and 1953-54 to 1957-58 the total amount and amount per head of population of the surplus or deficit of each State:—

**STATE SURPLUS REVENUE.**

Year.	N.S.W.(a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>TOTAL AMOUNT.</b> (£'000.)							
1938-39 ..	-2,459	- 787	14	- 397	- 221	- 26	- 3,876
1953-54 ..	128	711	343	1,810	- 103	15	2,904
1954-55 ..	-2,148	1,336	218	-2,234	- 484	-212	- 3,524
1955-56 ..	-6,833	- 3,246	-1,723	-1,430	-1,831	115	-14,948
1956-57 ..	129	-4,311	16	- 49	-1,912	-814	- 6,941
1957-58 ..	46	-3,213	-1,515	- 400	-1,123	-812	- 7,017

**PER HEAD OF POPULATION.**  
(£ s. d.)

1938-39 ..	-0 18 0	-0 8 5	0 0 3	-0 13 4	-0 9 5	-0 2 3	-0 11 3
1953-54 ..	0 0 9	0 5 10	0 5 3	2 6 1	-0 3 3	0 0 11	0 6 7
1954-55 ..	-0 12 5	0 10 9	0 3 4	-2 15 4	-0 14 11	-0 13 6	-0 7 10
1955-56 ..	-1 18 9	-1 5 3	-1 5 6	-1 14 3	-2 14 9	0 7 2	-1 12 4
1956-57 ..	0 0 9	-1 12 7	0 0 3	-0 1 2	-2 15 11	-2 9 11	-0 14 8
1957-58 ..	0 0 3	-1 3 8	-1 1 7	-0 9 0	-1 12 2	-2 8 7	-0 14 5

(a) See § 1, para. 2, page 814.

NOTE.—Minus sign (—) indicates deficit.

### § 3. State Trust Funds.

In addition to the moneys received as revenue and paid to the credit of the Consolidated Revenue Funds, considerable sums are held in trust for various purposes by the State Governments. The balances of trust funds held at 30th June for each of the years 1939 and 1954 to 1958 were as follows:—

#### STATE TRUST FUND BALANCES.

(£'000.)

At 30th June—			N.S.W.(a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
1939	..	..	15,684	8,189	3,062	1,448	3,744	530	32,657
1954	..	..	63,284	29,023	47,808	4,131	13,925	1,671	159,842
1955	..	..	63,435	30,649	50,549	4,127	11,686	739	161,185
1956	..	..	52,993	29,850	47,165	4,517	13,535	838	148,898
1957	..	..	55,412	32,138	48,034	4,718	14,537	1,151	155,990
1958	..	..	63,826	16,352	53,921	5,650	14,565	1,560	155,874

(a) Special Deposits Account and Special Accounts.

### § 4. State Loan Funds.

1. **General.**—As far back as 1842, revenue collections were supplemented by borrowed moneys, the earliest loan being raised by New South Wales for the purpose of assisting immigration, at rates of interest varying from 2½d. to 5½d. per £100 per diem, or approximately from 4½ per cent. to 8 per cent. per annum. State public borrowing however is mainly due to the fact that the State Governments, in addition to ordinary administrative duties, undertake functions which in other countries are usually entrusted to local authorities or left to private enterprise. Foremost amongst these are the construction and operation of the railway systems. Loan moneys have also been largely used for improvements to harbours and rivers, and for the construction of roads, water supply and sewerage works. The State loan expenditure and public debt thus differ very materially from those of most European countries, and from those of the Commonwealth, where such expenditure was very largely incurred for defence or war purposes, as the State debts consist chiefly of moneys raised and expended with the object of assisting the development of the resources of the country, and are to a very large extent represented by tangible assets.

Statements relating to "gross" loan expenditure are shown below. The gross expenditure represents the amounts disbursed during each year. Details of "net" loan expenditure, i.e., gross expenditure less any credits to the Loan Fund during the year on account of repayments of advances to local governing bodies, settlers, etc., the sale of assets, and transfers from other funds may be found in *Finance, Part I, Public and Private Finance* Bulletin No. 48, 1956–57 and No. 49, 1957–58. Such moneys are credited to the Loan Fund in the year of repayment irrespective of when the advance was made. (See also following page).

2. **Gross Loan Expenditure.**—(i) 1956–57 and 1957–58. Particulars of gross loan expenditure on works, services, etc., are shown in the following table:—

STATE GROSS LOAN EXPENDITURE ON WORKS, SERVICES, ETC., 1956-57.  
(£'000.)

Particulars.	N.S.W.	Vic.(a)	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>Public Works and Services—</i>							
Railways ..	12,500	7,407	5,510	2,314	3,820	566	32,117
Tramways and Omnibuses ..	1,000	..	..	500	111	151	1,762
Roads ..	159	{ 626 }	{ -451 }	10	..	..	..
Bridges ..	2,394	{ 107 }	..	..	..	..	..
Harbours and Rivers ..	..	{ 299 }	{ -35 }	1,052	{ 694 }	672	5,527
Lights and Lighthouses ..	..	..	..	..	..	..	..
Water Supply ..	..	{ 6,590 }	{ 2,242 }	{ 4,723 }	{ 2,653 }	172	21,599
Sewerage ..	2,762	{ 1,008 }	..	972	477	..	..
Electricity Supply ..	10,500	{ 3,400 }	..	5,000	2,100	6,634	27,634
Gas supply ..	..	{ 130 }	..	..	..	..	130
Public Buildings ..	13,333	14,686	3,079	6,224	2,847	2,128	42,297
Loans and Grants to Local Bodies ..	196	164	5,626	..	73	..	6,059
Housing (b) ..	86	321	1,654	2,811	1,360	232	6,464
Other Public Works, etc.	381	371	..	62	89	243	1,146
<i>Primary Production—</i>							
Soldier Settlement ..	3,837	3,580	301	2	..	30	7,750
Land for Settlement ..	..	..	241	47	41	..	329
Advances to Settlers ..	..	50	..	130	..	95	275
Water Conservation ..	..	..	2,339	{ 591 }	{ 203 }	..	..
Irrigation and Drainage ..	6,622	..	..	{ 538 }	{ 258 }	..	10,551
Vermi-proof Fencing ..	..	..	(c) 90	(d)	..	..	90
Agriculture ..	..	..	..	..	150	..	150
Agricultural Bank ..	..	..	920	..	80	..	1,000
Forestry ..	130	750	1,406	1,051	100	268	3,705
Mines and Mineral Resources ..	..	..	54	267	407	..	1,182
Other ..	311	143	..	49	8	1	219
<i>Other Purposes</i> ..	85	76	..	42	2,465	41	3,790
<i>Total Public Works, Services, etc.</i>	54,296	40,950	22,976	26,385	17,936	11,233	173,776
Per Head of Population ..	£15 2 8	£15 10 3	£16 12 10	£30 12 8	£26 4 1	£34 8 10	£18 6 7

(a) Expenditure from Loan Funds and on account of Loans; includes expenditure from Loan Funds, from Treasurer's Advance Account and from State Loans Repayment Fund. (b) Excludes expenditure from Commonwealth loans under Commonwealth-State Housing Agreement. (c) £90,000 transferred to Barrier Fences Trust Fund. (d) Included with Advances to Settlers. (e) Includes Rural Finance Corporation, for advances to rural industries, £920,000.

STATE GROSS LOAN EXPENDITURE ON WORKS, SERVICES, ETC., 1957-58.  
(£'000.)

Particulars.	N.S.W.	Vic.(a)	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>Public Works and Services—</i>							
Railways ..	12,600	7,049	4,940	1,989	2,904	221	29,703
Tramways and Omnibuses ..	1,300	..	..	700	79	100	2,179
Roads ..	150	{ 739 }	{ -415 }	15	..	..	..
Bridges ..	..	{ 845 }	..	..	..	..	..
Harbours and Rivers ..	2,731	{ 290 }	22	1,160	{ 946 }	524	7,007
Lights and Lighthouses ..	..	..	..	..	..	..	..
Water Supply ..	..	{ 6,960 }	{ -4,520 }	{ 4,649 }	{ 2,696 }	147	16,298
Sewerage ..	4,090	{ 500 }	..	1,311	465	..	..
Electricity Supply ..	10,250	{ 3,200 }	..	3,000	1,240	5,985	23,675
Gas Supply ..	..	{ 150 }	..	..	..	..	150
Public Buildings ..	15,458	15,342	3,761	6,198	2,997	2,516	46,272
Loans and Grants to Local Bodies ..	237	613	11,812	..	162	..	12,824
Housing(b) ..	170	..	2,100	2,555	1,151	258	6,234
Other Public Works, etc.	169	300	..	94	1,134	558	2,255
<i>Primary Production—</i>							
Soldier Settlement ..	3,808	3,599	322	2	..	42	7,773
Land for Settlement ..	..	..	174	100	..	..	274
Advances to Settlers ..	..	121	..	185	..	105	411
Water Conservation ..	..	..	2,345	{ 561 }	{ 309 }	..	..
Irrigation and Drainage ..	6,157	..	..	{ 509 }	{ 415 }	..	10,296
Vermi-proof Fencing ..	..	3 (c)	40	(d)	..	..	43
Agriculture ..	..	..	147	..	177	..	324
Agricultural Bank ..	..	..	1,050	..	377	..	1,427
Forestry ..	125	616	1,376	986	100	282	3,485
Mines and Mineral Resources ..	..	23	36	158	636	..	1,104
Other ..	251	77	..	23	11	..	212
<i>Other Purposes</i> ..	101	..	..	577	115	144	1,747
<i>Total Public Works, Services, etc.</i>	57,597	41,338	23,190	24,772	15,914	10,882	173,693
Per Head of Population ..	£15 14 11	£15 5 5	£16 10 6	£27 19 2	£22 15 7	£32 11 5	£17 18 7

(a) Expenditure from Loan Funds and on account of Loans; includes expenditure from Loan Funds, from Treasurer's Advance Account and from State Loans Repayment Fund. (b) Excludes expenditure from Commonwealth loans under Commonwealth-State Housing Agreement. (c) £40,000 transferred to Barrier Fences Trust Fund. (d) Included with Advances to Settlers. (e) Includes Rural Finance Corporation, for advances to rural industries, £700,000.

(ii) 1938-39 and 1953-54 to 1957-58. Particulars of gross loan expenditure on works, etc., for these years are shown in the following table :—

**STATE GROSS LOAN EXPENDITURE ON WORKS, SERVICES, ETC.**

Year.	N.S.W.	Vic.(a)	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>GROSS LOAN EXPENDITURE.</b> (£'000.)							
1938-39 ..	8,789	3,218	3,393	2,529	1,783	1,687	21,399
1953-54 ..	60,021	45,665	20,630	25,452	15,824	15,356	182,948
1954-55 ..	53,336	40,952	20,498	26,897	16,433	17,211	175,327
1955-56 ..	55,369	39,131	21,655	29,019	14,983	17,354	177,511
1956-57 ..	54,296	40,950	22,976	26,385	17,936	11,233	173,776
1957-58 ..	57,597	41,338	23,190	24,772	15,914	10,882	173,693

**PER HEAD OF POPULATION.**  
(£ s. d.)

1938-39 ..	3 4 3	1 14 5	3 7 4	4 5 0	3 16 4	7 2 0	3 1 11
1953-54 ..	17 12 6	18 16 11	15 17 3	32 7 8	25 1 10	49 12 7	20 13 3
1954-55 ..	15 8 4	16 9 2	15 9 4	33 6 2	25 6 6	54 19 10	19 7 9
1955-56 ..	15 14 2	15 5 2	16 0 2	34 15 6	22 7 11	54 7 4	19 3 2
1956-57 ..	15 2 8	15 10 3	16 12 10	30 12 8	26 4 1	34 8 10	18 6 7
1957-58 ..	15 14 11	15 5 5	16 10 6	27 19 2	22 15 7	32 11 5	17 18 7

(a) See footnote (a) to previous table.

The above tables do not include particulars of expenditure on loan discounts and flotations, the funding of deficits, the retirement of treasury bills, and similar items of a nature other than works, services, etc. Summaries of the gross and net expenditure and repayments in respect of all loan purposes for the years 1955-56 to 1957-58 are shown in paragraph 3 following.

3. Total Loan Expenditure.—The following table shows particulars, in summary form, of the total loan expenditure in each State during each of the years, 1955-56 to 1957-58.

**STATE LOAN EXPENDITURE : SUMMARY.**  
(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
1955-56.							
<i>Works and Services—</i>							
Gross Expenditure ..	55,369	39,131	21,655	29,019	14,983	17,354	177,511
Net Expenditure ..	49,750	36,343	19,015	24,152	13,314	13,301	155,875
Repayments ..	5,619	2,788	2,640	4,867	1,669	4,053	21,636
<i>Other than Works, etc.(a)—</i>							
Gross Expenditure ..	8	31	1	107	160	252	559
Net Expenditure ..	8	31	94	9	146	223	511
Repayments ..	..	..	-93	98	(b) 14	29	48
<b>Total Loan Expenditure—</b>							
Gross ..	55,377	39,162	21,656	29,126	15,143	17,606	178,070
Net ..	49,758	36,374	19,109	24,161	13,460	13,524	156,386
Repayments ..	5,619	2,788	2,547	4,965	1,683	4,082	21,684

For footnotes see next page.

STATE LOAN EXPENDITURE : SUMMARY—continued.  
(£'000.)

Particulars.	N.S.W.	Vic.	O'land.	S. Aust.	W. Aust.	Tas.	Total.
1956-57.							
<i>Works and Services—</i>							
Gross Expenditure ..	54,296	40,950	22,976	26,385	17,936	11,233	173,776
Net Expenditure ..	48,975	38,449	20,114	23,953	16,278	10,535	158,304
Repayments ..	5,321	2,501	2,862	2,432	1,658	698	15,472
<i>Other than Works, etc.(a)—</i>							
Gross Expenditure ..	2,671	4,747	—1	1,062	2,072	539	11,090
Net Expenditure ..	2,671	4,747	79	1,031	2,049	484	11,061
Repayments ..	..	..	—80	31	(b) 23	55	29
<b>Total Loan Expenditure—</b>							
Gross ..	56,967	45,697	22,975	27,447	20,008	11,772	184,866
Net ..	51,646	43,196	20,193	24,984	18,327	11,019	169,365
Repayments ..	5,321	2,501	2,782	2,463	1,681	753	15,501
1957-58.							
<i>Works and Services—</i>							
Gross Expenditure ..	57,597	41,338	23,190	24,772	15,914	10,882	173,693
Net Expenditure ..	52,610	38,421	20,022	21,752	14,136	10,044	156,985
Repayments ..	4,987	2,917	3,168	3,020	1,778	838	16,708
<i>Other than Works, etc.(a)—</i>							
Gross Expenditure ..	—986	3,965	..	57	1,364	813	5,213
Net Expenditure ..	—986	3,965	—590	..	1,308	789	4,486
Repayments ..	..	..	590	57	(b) 56	24	727
<b>Total Loan Expenditure—</b>							
Gross ..	56,611	45,303	23,190	24,829	17,278	11,695	178,906
Net ..	51,624	42,386	19,432	21,752	15,444	10,833	161,471
Repayments ..	4,987	2,917	3,758	3,077	1,834	862	17,435

(a) Includes exchange, discounts and flotation expenses, revenue and general cash deficits.

(b) From Consolidated Revenue Fund.

Information relating to the State Public Debt is given in division D. Commonwealth and State Public Debt (pp. 833-846).

## C. COMMONWEALTH AND STATE FINANCE.

1. Revenue and Expenditure.—(i) *Consolidated Revenue Funds.* The following tables show the aggregate revenue and expenditure of the Consolidated Revenue Funds of the Commonwealth and States for each of the years 1938-39 and 1953-54 to 1957-58. In these tables, the combined Commonwealth and State totals have been adjusted to exclude major duplications, but the separate Commonwealth and State figures are as shown in other divisions of this chapter. The items excluded from the total figures are :—payments made by the Commonwealth to the States and included in the State Consolidated Revenue Funds on account of tax reimbursements, interest under the Financial Agreement, special grants, special financial assistance, coal strike emergency grants, price control reimbursements, grants to universities, cattle tick control, tuberculosis capital expenditure, National Welfare Fund payments, and estimated payments of pay-roll tax by the States to the Commonwealth. There are other relatively minor payments for which adjustments have not been made and the adjusted figures are therefore still slightly overstated.

## COMMONWEALTH AND STATES : REVENUE AND EXPENDITURE.

Year ended 30th June—	Revenue.			Expenditure.		
	Commonwealth.	States.	Total.	Commonwealth.	States.	Total.
	£'000.	£'000.	£m.	£'000.	£'000.	£m.
1939 ..	95,065	124,283	209.6	95,065	128,159	213.5
1954 ..	1,022,790	470,393	1,314.2	1,022,790	467,489	1,311.3
1955 ..	1,067,441	495,296	1,378.2	1,067,441	498,820	1,381.7
1956 ..	1,138,358	526,011	1,466.1	1,138,358	540,959	1,481.0
1957 ..	1,311,835	576,934	1,672.4	1,311,835	583,875	1,679.4
1958 ..	1,323,771	605,183	1,690.7	1,323,771	612,200	1,697.7

(ii) *Loan Expenditure.* The aggregate gross loan expenditures of the Commonwealth and States on works and services for the years 1938-39 and 1953-54 to 1957-58 are shown in the following table :—

**COMMONWEALTH AND STATE GROSS LOAN EXPENDITURE : WORKS AND SERVICES.(a)**  
(£'000.)

Gross Loan Expenditure.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Commonwealth(b) .. ..	3,913	41,399	33,189	44,003	44,068	45,174
State .. .. .	21,399	182,948	175,327	177,511	173,776	173,693
<b>Total .. .. .</b>	<b>25,312</b>	<b>224,347</b>	<b>208,516</b>	<b>221,514</b>	<b>217,844</b>	<b>218,867</b>

(a) Excludes expenditure on loan flotations, funding deficits, etc. (b) Includes expenditure on Defence, War (1939-45) and Repatriation Services. Excludes payments to the National Debt Sinking Fund from proceeds of the loan from the International Bank for Reconstruction and Development, payments to the Swiss Loan Trust account from proceeds of the Swiss Loan and payments to the Canadian Loan Trust account from proceeds of the Canadian Loan (see p. 850).

2. *Taxation.*—The following table shows the combined Commonwealth and State taxation, and the amount per head of population, for the years 1938-39 and 1953-54 to 1957-58. Taxation collections by the State Governments which are not paid into the Consolidated Revenue Funds have been included.

**COMMONWEALTH AND STATE TAXATION : TOTAL NET COLLECTIONS.(a)**

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>NET COLLECTIONS.</b> (£'000.)						
Customs and Excise Duties ..	47,632	220,217	244,403	255,772	286,037	303,051
Sales Tax .. .. .	9,308	95,689	100,446	110,001	125,752	137,777
Land Tax .. .. .	2,897	4,359	5,011	5,969	11,827	15,407
Pay-roll Tax .. .. .	.. .. .	40,384	41,455	45,543	48,675	48,552
Income Taxes .. .. .	41,679	528,273	532,968	574,062	620,321	650,452
Probate and Succession Duties	6,916	28,525	31,216	33,508	37,089	39,477
Stamp Duties n.e.i. .. ..	3,466	14,543	16,027	18,181	21,336	24,527
Motor Taxes .. .. .	6,961	25,877	27,783	28,919	33,539	37,520
Liquor Taxes .. .. .	1,045	5,346	5,563	6,617	7,220	8,095
Racing .. .. .	1,251	7,503	6,992	7,430	7,495	7,870
Entertainments Tax .. ..	633	2,883	1,339	1,445	1,838	1,982
Licences, n.e.i., and other Taxes	2,841	7,251	13,891	14,334	12,142	14,877
<b>Total .. .. .</b>	<b>124,629</b>	<b>980,850</b>	<b>1,027,094</b>	<b>1,101,781</b>	<b>1,213,271</b>	<b>1,289,587</b>

**PER HEAD OF POPULATION.**  
(£ s. d.)

Customs and Excise Duties ..	6 17 5	24 14 10	26 17 9	27 9 1	30 0 0	31 2 1
Sales Tax .. .. .	1 6 10	10 15 0	11 1 0	11 16 2	13 3 9	14 2 8
Land Tax .. .. .	0 8 4	0 9 10	0 11 0	0 12 10	1 4 10	1 11 7
Pay-roll Tax .. .. .	.. .. .	4 10 9	4 11 2	4 17 9	5 2 1	4 19 8
Income Taxes .. .. .	6 0 3	59 7 1	58 12 7	61 12 6	65 1 2	66 14 10
Probate and Succession Duties	0 19 11	3 4 1	3 8 8	3 11 11	3 17 9	4 1 0
Stamp Duties n.e.i. .. ..	0 10 0	1 12 8	1 15 3	1 19 0	2 4 9	2 10 4
Motor Taxes .. .. .	1 0 1	2 18 2	3 1 2	3 2 1	3 10 4	3 17 0
Liquor Taxes .. .. .	0 3 0	0 12 0	0 12 3	0 14 2	0 15 2	0 16 7
Racing .. .. .	.. .. .	0 16 10	0 15 5	0 15 11	0 15 9	0 16 2
Entertainments Tax .. ..	0 5 6	0 6 6	0 3 0	0 3 1	0 3 10	0 4 1
Licences, n.e.i., and other Taxes	0 8 1	0 16 4	1 10 7	1 11 0	1 5 6	1 10 6
<b>Total .. .. .</b>	<b>17 19 5</b>	<b>110 4 1</b>	<b>112 19 10</b>	<b>118 5 6</b>	<b>127 4 11</b>	<b>132 6 6</b>

(a) For separate details of Commonwealth and State taxation collections, see pages 785 and 815.

## D. COMMONWEALTH AND STATE PUBLIC DEBT.

## § 1. General.

Under the Financial Agreement between the Commonwealth and the States in 1927, the Commonwealth and State public debts were amalgamated and the Commonwealth Government accepted responsibility for the State public debts. The Commonwealth is reimbursed by the States for interest, exchange, etc., paid on their behalf and the debt is redeemed from the National Debt Sinking Fund to which both the Commonwealth and the States make contributions. Under the agreement, the Commonwealth arranges for all borrowings on behalf of the Commonwealth and the States, and Commonwealth securities are issued for all money borrowed.

In the statistical tables relating to public debt, the units of currency for debt outstanding and interest payable, except in § 3, para. 5, are :—Debt in Australia—£ Australian ; Debt in London—£ Sterling ; Debt in New York—£ (converted from dollars at the rate of \$4.8665 to £1) ; Debt in Canada—£ (converted from dollars at the rate of \$4.8665 to £1) ; Debt in Switzerland—£ (converted from Swiss francs at the rate of 1,000 Swiss francs = £A.102 1s. 10d).

The totals shown represent the total “ face ” or “ book ” value of the debt without adjustment on account of the difference in currency mentioned above.

In § 3, para. 5 only, details of the debt for the Commonwealth and each State are given in Australian currency.

## § 2. The Financial Agreement between the Commonwealth and the States.

1. **General.**—Full details of the Financial Agreement between the Commonwealth and the States are given in earlier issues of the Official Year Book (*see* No. 37, pp. 685–690). In this issue, a summary of the main provisions only is given.

2. **Australian Loan Council.**—The Australian Loan Council was set up to co-ordinate the public borrowings of the Commonwealth and the States. It consists of the Prime Minister of the Commonwealth, or another Minister nominated by him in writing, as Chairman, and the State Premiers, or Ministers nominated by them in writing. Each year the Loan Council examines the loan programmes of the Commonwealth and the States and determines the total amount to be borrowed during the year. Borrowings by the Commonwealth for defence purposes are not subject to decisions of the Loan Council.

3. **Loan Raisings for the Commonwealth and States.**—Subject to the decisions of the Loan Council, the Commonwealth arranges for all borrowings for or on behalf of the Commonwealth or any State, and for all conversions, renewals, redemptions, and consolidations of the public debts of the Commonwealth and of the States.

If the Loan Council unanimously decides, however, a State may borrow outside Australia in its own name, and may issue securities for the amount so borrowed. The Commonwealth then guarantees that the State will fulfil all its obligations to bondholders in respect of the money so borrowed and the money is deemed to be borrowed by the Commonwealth for and on behalf of the State.

Subject to any maximum limits decided upon by the Loan Council for interest, brokerage, discount and other charges, the Commonwealth or any State may—

- (i) borrow within its own territory, for any purpose, money from any authorities, bodies, funds or institutions (including Savings Banks) constituted or established under Commonwealth or State law or practice ;
- (ii) borrow from the public by means of counter sales of securities ; and
- (iii) use any available public moneys.

However, any securities issued for money so borrowed or used must be Commonwealth securities on terms approved by the Loan Council.

4. **Taking over of State Public Debts.**—The Commonwealth took over on 1st July, 1929—

- (a) the balance then unpaid of the gross public debt of each State existing on 30th June, 1927 ; and
- (b) all other debts of each State existing on 1st July, 1929, for money borrowed by that State deemed by the Agreement to be money borrowed by the Commonwealth for and on behalf of the State,

and in respect of these debts assumed, as between the Commonwealth and the States the liabilities of the States to bond holders.

5. *Transferred Properties.*—In relation to State properties transferred to the Commonwealth under Section 85 of the Constitution, the States as from 1st July, 1929, were discharged from any liability in respect of principal, interest or debt redemption on so much of the debts bearing interest at 5 per cent. per annum, taken over by the Commonwealth as amounted to the agreed value of these properties, namely £10,924,323.

6. *Payment of Interest.*—For a period of 58 years from 1st July, 1927, the Commonwealth agreed to contribute the sum of £7,584,912 each year towards the interest payable on the State debts. The balance of the interest payable on the State debts is paid to the Commonwealth by the States.

7. *Sinking Fund.*—(i) *State Public Debt existing at 30th June, 1927.* A sinking fund at the rate of 7s. 6d. per annum for each £100 of the net public debts of the States existing on 30th June, 1927, and conversions thereof, was established under the terms of the Agreement. The Commonwealth contributes annually from revenue 2s. 6d. per £100 on the net public debts of the States existing at 30th June, 1927, and each State contributes annually 5s. per £100 on the net public debt of such State at 30th June, 1927. The payments of the Commonwealth and of all States except New South Wales will continue for a period of 58 years from 1st July, 1927, and those of New South Wales for a similar period from 1st July, 1928.

(ii) *New Borrowings.* On new borrowings after 1st July, 1927, (except those for redemptions or conversions, or funding a State deficit) a sinking fund at the rate of 10s. per £100 per annum was established and the State and the Commonwealth contribute from revenue equal shares for a period of 53 years from the date of raising. (New South Wales did not commence sinking fund contributions in respect of new loans raised in the financial year 1927–28 until 1st July, 1928.)

(iii) *Loans raised to meet a Revenue Deficit.* In respect of any loan (except any of the loans referred to in para. (iv) below) raised by a State after 30th June, 1927, to meet a revenue deficit accruing after that date, no sinking fund contribution is made by the Commonwealth, but the State makes a sinking fund contribution at the rate of not less than 4 per cent. per annum of the loan for a period sufficient to provide for the redemption of the loan, the contributions being deemed to accumulate at the rate of 4½ per cent. per annum compound interest.

(iv) *Loans raised to meet Revenue Deficits between 30th June, 1927 and 1st July, 1935.* Special contributions are payable in respect of loans raised by a State or by the Commonwealth on behalf of a State, on the security of Commonwealth Treasury Bills, to meet a revenue deficit which accrued after 30th June, 1927, and before 1st July, 1935. Details of these contributions are given in Official Year Book No. 37, pages 688 and 689.

(v) *National Debt Commission.* The sinking funds established are controlled by the National Debt Commission, which may arrange with any State to act as its agent in connexion with payments due to bond holders. Except where the conditions relating to sinking funds, redemption funds, and funds of a like nature held by a State on 30th June, 1929, precluded such transfer, all such funds were transferred to the National Debt Commission.

(vi) *Operation of Sinking Fund.* Sinking fund contributions made in respect of the debts of a State, and funds of that State transferred to the National Debt Commission, are not accumulated but must be applied, whenever expedient, to the redemption and repurchase of loan securities. When such a loan security is repurchased or redeemed by the National Debt Commission, it is cancelled, and the State, in addition to sinking fund contributions otherwise payable, pays a further annual sinking fund contribution at the rate of 4½ per cent. on the face value of the cancelled security for the balance of the period during which the original contribution is payable in respect of that debt.

(vii) *Oversea Debt.* Sinking fund contributions in respect of oversea debt shall be calculated at the mint par of exchange prevailing on 1st July, 1927.

8. Borrowing by Semi-Governmental Authorities.—It was realized from the inception of the Loan Council that, in the interests of co-ordinated borrowing, the Council should be advised of the borrowing of large amounts by semi-governmental authorities. In May, 1936, all resolutions passed by the Loan Council in connexion with semi-governmental borrowings were consolidated into one set of rules, which superseded all previous resolutions. This set of rules provides, *inter alia*, for the submission of annual loan programmes in respect of semi-governmental authorities proposing to raise £100,000 or more in a year, for the consideration of such programmes in conjunction with the loan programme of the Government concerned, and for the fixing of the terms of individual semi-governmental loans coming within the scope of the annual programme.

### § 3. Commonwealth and State Public Debt Outstanding.

1. Public Debt, Annual Interest Payable and Average Rate of Interest at 30th June, 1957 and 1958.—In the following tables, details are given of the Commonwealth and State Public Debt, annual interest payable and average rate of interest at 30th June, 1957 and 1958.

#### COMMONWEALTH AND STATE PUBLIC DEBT AND ANNUAL INTEREST PAYABLE AT 30th JUNE, 1957.

Particulars.	Maturing in—					Total.
	Australia.	London.	New York.	Canada.	Switzer-land.	
<b>DEBT.</b>						
	£A.'000.	£Stg.'000.	£'000.(a)	£'000.(a)	£'000.(a)	£'000.(a)
<i>Commonwealth Debt—</i>						
<i>War (1914–18) Debt(b)—</i>						
Stock and Bonds .. .. .	112,518	7,534	..	..	..	120,052
Other Debt(c) .. .. .	88	..	..	..	..	88
<i>Total War (1914–18) Debt .. .. .</i>	<i>112,606</i>	<i>7,534</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>120,140</i>
<i>War (1939–45) Debt—</i>						
Stock and Bonds .. .. .	919,395	5,725	..	..	..	925,120
Treasury Bill, Internal .. ..	240,990	..	..	..	..	240,990
Treasury Bills, Public .. ..	150,000	..	..	..	..	150,000
Other Debt(d) .. .. .	23,708	..	..	..	..	23,708
<i>Total War (1939–45) Debt .. .. .</i>	<i>1,334,093</i>	<i>5,725</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>1,339,818</i>
<i>Works and Other Purposes—</i>						
Stock and Bonds .. .. .	288,487	48,711	9,011	3,069	12,251	361,529
Treasury Bills, Internal .. ..	10,810	..	..	..	..	10,810
International Bank Dollar Loan .. .. .	..	..	51,537	..	..	51,537
Serial Notes .. .. .	..	..	1,597	..	..	1,597
<i>Total Works and Other Purposes .. .. .</i>	<i>299,297</i>	<i>48,711</i>	<i>62,145</i>	<i>3,069</i>	<i>12,251</i>	<i>425,473</i>
<i>Total Commonwealth Debt .. .. .</i>	<i>1,745,996</i>	<i>61,970</i>	<i>62,145</i>	<i>3,069</i>	<i>12,251</i>	<i>1,885,431</i>
<i>State Debt—</i>						
Stock and Bonds .. .. .	1,786,806	257,380	22,414	..	..	2,066,600
Debentures .. .. .	35,636	..	..	..	..	35,636
Balance of Debts of States taken over by Commonwealth and still represented by State Securities .. .. .	..	4,241	..	..	..	4,241
<i>Total State Debt .. .. .</i>	<i>1,822,442</i>	<i>261,621</i>	<i>22,414</i>	<i>..</i>	<i>..</i>	<i>2,106,477</i>
<b>Grand Total Commonwealth and State Debt .. .. .</b>	<b>3,568,438</b>	<b>323,591</b>	<b>84,559</b>	<b>3,069</b>	<b>12,251</b>	<b>3,991,908</b>

(a) See § 1, p. 831. (b) Excludes War (1914–18) Debt due to United Kingdom Government (£79,724,000). Repayment of this debt and interest thereon (£3,919,774) was suspended in 1931. (c) War and Peace Savings Certificates and Stamps and War Gratuity Bonds. (d) Advance Loan Subscriptions, National Savings Bonds, War Savings and Savings Certificates, War Savings and National Savings Stamps.

**COMMONWEALTH AND STATE PUBLIC DEBT AND ANNUAL INTEREST PAYABLE AT 30TH JUNE, 1937—continued.**

Particulars	Maturing in—					Total.
	Australia.	London.	New York.	Canada.	Switzer-land.	
<b>DEBT PER HEAD OF POPULATION.</b>						
	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
<i>Commonwealth Debt—</i>						
War (1914-18) Debt(b) ..	11 13 6	0 15 8	..	..	..	12 9 2
War (1939-45) Debt ..	138 7 0	0 11 10	..	..	..	138 18 10
Works and Other Purposes	31 0 9	5 1 0	6 8 11	0 6 4	1 5 5	44 2 5
<i>Total Commonwealth Debt ..</i>	<i>181 1 3</i>	<i>6 8 6</i>	<i>6 8 11</i>	<i>0 6 4</i>	<i>1 5 5</i>	<i>195 10 5</i>
<i>Total State Debt ..</i>	<i>190 2 4</i>	<i>27 5 10</i>	<i>2 6 9</i>	<i>..</i>	<i>..</i>	<i>219 14 11</i>
<b>Grand Total Commonwealth and State Debt ..</b>	<b>370 1 1</b>	<b>33 11 2</b>	<b>8 15 4</b>	<b>0 6 4</b>	<b>1 5 5</b>	<b>413 19 4</b>

Particulars	ANNUAL INTEREST PAYABLE.					
	£A.'000.	£Stg.'000.	£'000.(a)	£'000.(a)	£'000.(a)	£'000.(a)
<i>Commonwealth Debt—</i>						
War (1914-18) Debt(b) ..	3,930	228	..	..	..	4,158
War (1939-45) Debt ..	35,903	229	..	..	..	36,132
Works and Other Purposes.	11,500	1,746	2,754	123	475	16,598
<i>Total Commonwealth Debt ..</i>	<i>51,333</i>	<i>2,203</i>	<i>2,754</i>	<i>123</i>	<i>475</i>	<i>56,888</i>
<i>Total State Debt ..</i>	<i>70,370</i>	<i>8,490</i>	<i>879</i>	<i>..</i>	<i>..</i>	<i>79,739</i>
<b>Grand Total Commonwealth and State Debt ..</b>	<b>121,703</b>	<b>10,693</b>	<b>3,633</b>	<b>123</b>	<b>475</b>	<b>136,627</b>

Particulars	ANNUAL INTEREST PAYABLE PER HEAD OF POPULATION.					
	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
<i>Commonwealth Debt—</i>						
War (1914-18) Debt(b) ..	0 8 2	0 0 6	..	..	..	0 8 8
War (1939-45) Debt ..	3 14 6	0 0 5	..	..	..	3 14 11
Works and Other Purposes	1 3 10	0 3 8	0 5 9	0 0 3	0 0 11	1 14 5
<i>Total Commonwealth Debt ..</i>	<i>5 6 6</i>	<i>0 4 7</i>	<i>0 5 9</i>	<i>0 0 3</i>	<i>0 0 11</i>	<i>5 18 0</i>
<i>Total State Debt ..</i>	<i>7 6 9</i>	<i>0 17 9</i>	<i>0 1 10</i>	<i>..</i>	<i>..</i>	<i>8 6 4</i>
<b>Grand Total Commonwealth and State Debt ..</b>	<b>12 12 5</b>	<b>1 2 3</b>	<b>0 7 6</b>	<b>0 0 3</b>	<b>0 0 11</b>	<b>14 3 4</b>

Particulars	AVERAGE RATE OF INTEREST PAYABLE (PER £100 PER ANNUM).					
	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
<i>Commonwealth Debt—</i>						
War (1914-18) Debt(b) ..	3 9 11	3 0 5	..	..	..	3 9 3
War (1939-45) Debt ..	2 13 10	4 0 0	..	..	..	2 14 0
Works and Other Purposes	3 16 10	3 11 9	4 8 8	4 0 0	3 17 6	3 18 0
<i>Total Commonwealth Debt ..</i>	<i>2 18 10</i>	<i>3 11 1</i>	<i>4 8 8</i>	<i>4 0 0</i>	<i>3 17 6</i>	<i>3 0 4</i>
<i>Total State Debt ..</i>	<i>3 17 3</i>	<i>3 4 11</i>	<i>3 18 6</i>	<i>..</i>	<i>..</i>	<i>3 15 9</i>
<b>Grand Total Commonwealth and State Debt ..</b>	<b>3 8 3</b>	<b>3 6 1</b>	<b>4 5 11</b>	<b>4 0 0</b>	<b>3 17 6</b>	<b>3 8 6</b>

(a) See §1, p. 831. (b) Excludes War (1914-18) Debt due to United Kingdom Government (£79,724,000). Repayment of this debt and interest thereon (£3,919,774) was suspended in 1931.

COMMONWEALTH AND STATE PUBLIC DEBT AND ANNUAL INTEREST  
PAYABLE AT 30TH JUNE 1958.

Particulars.	Maturing in—					Total.
	Australia.	London.	New York.	Canada.	Switzer-land.	
DEBT.						
	£A.'000.	£Stg.'000.	£'000.(a)	£'000.(a)	£'000.(a)	£'000.(a)
<i>Commonwealth Debt—</i>						
<i>War (1914-18) Debt(b)—</i>						
Stock and Bonds .. .. .	97,056	7,534	..	..	..	104,590
Other Debt(c) .. .. .	84	..	..	..	..	84
<i>Total War (1914-18) Debt .. .. .</i>	<i>97,140</i>	<i>7,534</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>104,674</i>
<i>War (1939-45) Debt—</i>						
Stock and Bonds .. .. .	779,472	5,655	..	..	..	785,127
Treasury Bills, Internal .. .. .	253,490	..	..	..	..	253,490
Treasury Bills Public .. .. .	140,000	..	..	..	..	140,000
Other Debt(d) .. .. .	17,596	..	..	..	..	17,596
<i>Total War (1939-45) Debt .. .. .</i>	<i>1,190,558</i>	<i>5,655</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>1,196,213</i>
<i>Works and Other Purposes—</i>						
Stock and Bonds .. .. .	290,696	48,476	9,650	2,907	12,251	363,980
Treasury Bills, Internal .. .. .	10,810	..	..	..	..	10,810
International Bank Dollar Loan .. .. .	..	..	57,602	..	..	57,602
Serial Notes .. .. .	..	..	1,597	..	..	1,597
<i>Total Works and Other Purposes .. .. .</i>	<i>301,506</i>	<i>48,476</i>	<i>68,849</i>	<i>2,907</i>	<i>12,251</i>	<i>433,989</i>
<i>Total Commonwealth Debt .. .. .</i>	<i>1,589,204</i>	<i>61,665</i>	<i>68,849</i>	<i>2,907</i>	<i>12,251</i>	<i>1,734,876</i>
<i>State Debt—</i>						
Stock and Bonds .. .. .	1,930,080	252,514	26,223	..	..	2,208,817
Debentures .. .. .	34,874	..	..	..	..	34,874
Balance of Debt of States taken over by Commonwealth and still represented by State Securities .. .. .	..	4,241	..	..	..	4,241
<i>Total State Debt .. .. .</i>	<i>1,964,954</i>	<i>256,755</i>	<i>26,223</i>	<i>..</i>	<i>..</i>	<i>2,247,932</i>
<i>Grand Total Commonwealth and State Debt .. .. .</i>	<i>3,554,158</i>	<i>318,420</i>	<i>95,072</i>	<i>2,907</i>	<i>12,251</i>	<i>3,982,808</i>

(a) See § 1, p. 831.

(b) Excludes War (1914-18) Debt due to United Kingdom Government (£79,724,000). Repayment of this debt and interest thereon (£3,919,774) was suspended in 1931.

(c) War and Peace Savings Certificates and Stamps and War Gratuity Bonds. (d) Advance Loan Subscriptions National Savings Bonds, War Savings and Savings Certificates, War Savings and National Savings Stamps.

COMMONWEALTH AND STATE PUBLIC DEBT AND ANNUAL INTEREST  
PAYABLE AT 30TH JUNE, 1958—continued.

Particulars.	Maturing in—					Total.
	Australia.	London.	New York.	Canada.	Switzer-land.	
<b>DEBT PER HEAD OF POLUPATION.</b>						
	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
<i>Commonwealth Debt—</i>						
War (1914–18) Debt(b) ..	9 17 4	0 15 4	..	..	..	10 12 8
War (1939–45) Debt ..	120 18 4	0 11 6	..	..	..	121 9 10
Works and Other Purposes..	30 12 5	4 18 5	6 19 10	0 5 11	1 4 11	44 1 6
<i>Total Commonwealth Debt .. ..</i>	<i>161 8 1</i>	<i>6 5 3</i>	<i>6 19 10</i>	<i>0 5 11</i>	<i>1 4 11</i>	<i>176 4 0</i>
<i>Total State Debt .. ..</i>	<i>200 16 1</i>	<i>26 4 10</i>	<i>2 13 7</i>	..	..	<i>229 14 6</i>
<b>Grand Total Commonwealth and State Debt ..</b>	<b>360 19 5</b>	<b>32 6 9</b>	<b>9 13 1</b>	<b>0 5 11</b>	<b>1 4 11</b>	<b>404 10 1</b>

**ANNUAL INTEREST PAYABLE.**

	£A.'000.	£Stg.'000.	£'000.(a)	£'000.(a)	£'000.(a)	£'000.(a)
<i>Commonwealth Debt—</i>						
War (1914–18) Debt(b) ..	3,564	228	..	..	..	3,792
War (1939–45) Debt ..	31,303	226	..	..	..	31,529
Works and Other Purposes..	12,266	1,739	3,078	116	475	17,674
<i>Total Commonwealth Debt .. ..</i>	<i>47,133</i>	<i>2,193</i>	<i>3,078</i>	<i>116</i>	<i>475</i>	<i>52,995</i>
<i>Total State Debt .. ..</i>	<i>78,188</i>	<i>8,821</i>	<i>1,065</i>	..	..	<i>88,074</i>
<b>Grand Total Commonwealth and State Debt ..</b>	<b>125,321</b>	<b>11,014</b>	<b>4,143</b>	<b>116</b>	<b>475</b>	<b>141,069</b>

**ANNUAL INTEREST PAYABLE PER HEAD OF POPULATION.**

	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
<i>Commonwealth Debt—</i>						
War (1914–18) Debt(b) ..	0 7 3	0 0 6	..	..	..	0 7 9
War (1939–45) Debt ..	3 3 7	0 0 5	..	..	..	3 4 0
Works and Other Purposes..	1 4 11	0 3 6	0 6 3	0 0 3	0 1 0	1 15 11
<i>Total Commonwealth Debt .. ..</i>	<i>4 15 9</i>	<i>0 4 5</i>	<i>0 6 3</i>	<i>0 0 3</i>	<i>0 1 0</i>	<i>5 7 8</i>
<i>Total State Debt .. ..</i>	<i>7 19 10</i>	<i>0 18 0</i>	<i>0 2 2</i>	..	..	<i>9 0 0</i>
<b>Grand Total Commonwealth and State Debt ..</b>	<b>12 14 7</b>	<b>1 2 4</b>	<b>0 8 5</b>	<b>0 0 3</b>	<b>0 1 0</b>	<b>14 6 7</b>

**AVERAGE RATE OF INTEREST PAYABLE (PER £100 PER ANNUM).**

	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
<i>Commonwealth Debt—</i>						
War (1914–18) Debt(b) ..	3 13 6	3 0 5	..	..	..	3 12 6
War (1939–45) Debt ..	2 12 7	4 0 0	..	..	..	2 12 9
Works and Other Purposes..	4 1 6	3 11 9	4 9 5	4 0 0	3 17 6	4 1 7
<i>Total Commonwealth Debt .. ..</i>	<i>2 19 4</i>	<i>3 11 1</i>	<i>4 9 5</i>	<i>4 0 0</i>	<i>3 17 6</i>	<i>3 1 2</i>
<i>Total State Debt .. ..</i>	<i>3 19 7</i>	<i>3 8 9</i>	<i>4 1 2</i>	..	..	<i>3 18 4</i>
<b>Grand Total Commonwealth and State Debt ..</b>	<b>3 10 7</b>	<b>3 9 2</b>	<b>4 7 2</b>	<b>4 0 0</b>	<b>3 17 6</b>	<b>3 10 10</b>

(a) See § 1, p. 831. (b) Excludes War (1914–18) Debt due to United Kingdom Government (£79,724,000). Repayment of this debt and interest thereon (£3,919,774) was suspended in 1931.

2. Public Debt and Annual Interest Payable, 1939 and 1954 to 1958.—In the following table, details are given of the Public Debt and annual interest payable, including the average rate of interest, at 30th June, 1939 and 1954 to 1958. A dissection of debt for these years into debt payable in Australia, London, New York, Canada and Switzerland may be found in the annual bulletin *Finance, Part I, Public and Private Finance*.

COMMONWEALTH AND STATE PUBLIC DEBT AND ANNUAL INTEREST PAYABLE AT 30th JUNE.

Particulars.	1939.	1954.	1955.	1956.	1957.	1958.
<b>DEBT.</b> (£'000.) (a)						
<i>Commonwealth Debt—</i>						
War (1914–18) Debt ..	186,214	145,964	134,079	129,880	120,140	104,674
War (1939–45) Debt ..	1,464,767	1,464,767	1,444,832	1,405,072	1,339,818	1,196,213
Works and Other Purposes ..	131,313	307,124	344,806	391,615	425,473	433,989
<i>Total Commonwealth Debt</i>	<i>317,527</i>	<i>1,917,855</i>	<i>1,923,717</i>	<i>1,926,567</i>	<i>1,885,431</i>	<i>1,734,876</i>
<i>State Debt .. .. .</i>	<i>897,772</i>	<i>1,688,948</i>	<i>1,825,727</i>	<i>1,962,027</i>	<i>2,106,477</i>	<i>2,247,932</i>
<b>Grand Total Commonwealth and State Debt</b>	<b>1,215,299</b>	<b>3,606,803</b>	<b>3,749,444</b>	<b>3,888,594</b>	<b>3,991,908</b>	<b>3,982,808</b>

ANNUAL INTEREST PAYABLE.  
(£'000.) (a)

<i>Commonwealth Debt—</i>						
War (1914–18) Debt ..	7,376	4,851	4,501	4,408	4,158	3,792
War (1939–45) Debt ..	38,758	38,758	38,580	37,731	36,132	31,529
Works and Other Purposes ..	5,150	10,490	12,488	14,489	16,598	17,674
<i>Total Commonwealth Debt</i>	<i>12,526</i>	<i>54,099</i>	<i>55,569</i>	<i>56,628</i>	<i>56,888</i>	<i>52,995</i>
<i>State Debt .. .. .</i>	<i>33,644</i>	<i>55,022</i>	<i>64,046</i>	<i>70,610</i>	<i>79,739</i>	<i>88,074</i>
<b>Grand Total Commonwealth and State Debt</b>	<b>46,170</b>	<b>109,121</b>	<b>119,615</b>	<b>127,238</b>	<b>136,627</b>	<b>141,069</b>

AVERAGE RATE OF INTEREST PAYABLE (PER £100 PER ANNUM).  
(£ s. d.) (a)

<i>Commonwealth Debt—</i>						
War (1914–18) Debt ..	3 19 3	3 6 6	3 7 5	3 8 0	3 9 3	3 12 6
War (1939–45) Debt ..	2 12 11	2 12 11	2 13 5	2 13 9	2 14 0	2 12 9
Works and Other Purposes ..	3 18 5	3 8 4	3 12 6	3 14 0	3 18 0	4 1 7
<i>Total Commonwealth Debt</i>	<i>3 18 11</i>	<i>2 16 5</i>	<i>2 17 10</i>	<i>2 18 10</i>	<i>3 0 4</i>	<i>3 1 2</i>
<i>State Debt .. .. .</i>	<i>3 14 11</i>	<i>3 5 2</i>	<i>3 10 2</i>	<i>3 12 0</i>	<i>3 15 9</i>	<i>3 18 4</i>
<b>Grand Total Commonwealth and State Debt</b>	<b>3 16 0</b>	<b>3 0 6</b>	<b>3 3 10</b>	<b>3 5 5</b>	<b>3 8 6</b>	<b>3 10 10</b>

(a) See § 1, p. 831.

3. State Public Debt and Annual Interest Payable at 30th June, 1957 and 1958.—In paragraphs 1 and 2, totals only of the States' Public Debt are given. In the following tables, the total debt of each State and the amounts outstanding per head of population at 30th June, 1957 and 1958, the annual interest payable and the average rate of interest payable are shown according to the place of flotation.

## STATE PUBLIC DEBT AND ANNUAL INTEREST PAYABLE AT 30th JUNE, 1957.

State.	Maturing in Australia.	Maturing Overseas.			Grand Total.
		London.	New York.	Total Overseas.	

## DEBT.

	£A.'000.	£Stg.'000.	£'000.(a)	£'000.(a)	£'000.(a)
New South Wales .. ..	619,791	112,081	10,824	122,905	742,696
Victoria .. ..	439,556	38,759	3,504	42,263	481,819
Queensland .. ..	221,617	43,449	4,254	47,703	269,320
South Australia .. ..	241,315	31,261	2,337	33,598	274,913
Western Australia .. ..	174,411	29,585	1,149	30,734	205,145
Tasmania .. ..	125,752	6,486	346	6,832	132,584
<b>Total .. ..</b>	<b>1,822,442</b>	<b>261,621</b>	<b>22,414</b>	<b>284,035</b>	<b>2,106,477</b>

## DEBT PER HEAD OF POPULATION.

	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
New South Wales .. ..	171 1 6	30 18 9	2 19 9	33 18 6	205 0 0
Victoria .. ..	164 8 3	14 9 11	1 6 3	15 16 2	180 4 5
Queensland .. ..	158 13 4	31 2 2	3 0 11	34 3 1	192 16 5
South Australia .. ..	276 7 8	35 16 1	2 13 6	38 9 7	314 17 3
Western Australia .. ..	252 1 8	42 15 3	1 13 2	44 8 5	296 10 1
Tasmania .. ..	383 10 3	19 15 7	1 1 2	20 16 9	404 7 0
<b>Total .. ..</b>	<b>190 2 4</b>	<b>27 5 10</b>	<b>2 6 9</b>	<b>29 12 7</b>	<b>219 14 11</b>

## ANNUAL INTEREST PAYABLE.

	£A.'000.	£Stg.'000.	£'000. (a)	£'000. (a)	£'000. (a)
New South Wales .. ..	23,640	3,638	418	4,056	27,696
Victoria .. ..	17,306	1,282	141	1,423	18,729
Queensland .. ..	8,393	1,442	161	1,603	9,996
South Australia .. ..	9,383	1,006	97	1,103	10,486
Western Australia .. ..	6,667	904	47	951	7,618
Tasmania .. ..	4,981	218	15	233	5,214
<b>Total .. ..</b>	<b>70,370</b>	<b>8,490</b>	<b>879</b>	<b>9,369</b>	<b>79,739</b>

## AVERAGE RATE OF INTEREST PAYABLE (PER £100 PER ANNUM).

	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
New South Wales .. ..	3 16 3	3 4 11	3 17 3	3 6 0	3 14 7
Victoria .. ..	3 18 9	3 6 2	4 0 8	3 7 4	3 17 9
Queensland .. ..	3 15 9	3 6 4	3 15 10	3 7 3	3 14 3
South Australia .. ..	3 17 9	3 4 5	4 2 9	3 5 8	3 16 3
Western Australia .. ..	3 16 5	3 1 1	4 1 6	3 1 11	3 14 3
Tasmania .. ..	3 19 3	3 7 4	4 7 11	3 8 5	3 18 8
<b>Total .. ..</b>	<b>3 17 3</b>	<b>3 4 11</b>	<b>3 18 6</b>	<b>3 6 0</b>	<b>3 15 9</b>

(a) See § 1, p. 831.

## STATE PUBLIC DEBT AND ANNUAL INTEREST PAYABLE AT 30th JUNE, 1958.

State.	Maturing in Australia.	Maturing Overseas.			Grand Total.
		London.	New York.	Total Overseas.	
DEBT.					
	£A.'000.	£Stg.'000.	£'000.(a)	£'000.(a)	£'000.(a)
New South Wales .. ..	667,470	107,956	12,036	119,992	787,462
Victoria .. ..	475,104	38,572	4,537	43,109	518,213
Queensland .. ..	237,958	43,270	4,719	47,989	285,947
South Australia .. ..	261,108	30,961	2,752	33,713	294,821
Western Australia .. ..	187,373	29,530	1,525	31,055	218,428
Tasmania .. ..	135,941	6,466	654	7,120	143,061
<b>Total .. ..</b>	<b>1,964,954</b>	<b>256,755</b>	<b>26,223</b>	<b>282,978</b>	<b>2,247,932</b>

## DEBT PER HEAD OF POPULATION.

	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
New South Wales .. ..	180 18 6	29 5 3	3 5 3	32 10 6	213 9 0
Victoria .. ..	173 6 2	14 1 5	1 13 1	15 14 6	189 0 8
Queensland .. ..	167 17 8	30 10 7	3 6 7	33 17 2	201 14 10
South Australia .. ..	291 3 5	34 10 6	3 1 5	37 11 11	328 15 4
Western Australia .. ..	265 13 8	41 17 5	2 3 3	44 0 8	309 14 4
Tasmania .. ..	405 5 10	19 5 6	1 19 0	21 4 6	426 10 4
<b>Total .. ..</b>	<b>200 16 1</b>	<b>26 4 10</b>	<b>2 13 7</b>	<b>28 18 5</b>	<b>229 14 6</b>

## ANNUAL INTEREST PAYABLE.

	£A.'000.	£Stg.'000.	£'000.(a)	£'000.(a)	£'000.(a)
New South Wales .. ..	26,335	3,994	477	4,471	30,806
Victoria .. ..	19,267	1,276	191	1,467	20,734
Queensland .. ..	9,216	1,436	184	1,620	10,836
South Australia .. ..	10,495	995	118	1,113	11,608
Western Australia .. ..	7,371	902	65	967	8,338
Tasmania .. ..	5,504	218	30	248	5,752
<b>Total .. ..</b>	<b>78,188</b>	<b>8,821</b>	<b>1,065</b>	<b>9,886</b>	<b>88,074</b>

## AVERAGE RATE OF INTEREST PAYABLE (PER £100 PER ANNUM).

	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
New South Wales .. ..	3 18 11	3 14 0	3 19 2	3 14 6	3 18 3
Victoria .. ..	4 1 1	3 6 2	4 4 3	3 8 0	4 0 0
Queensland .. ..	3 17 6	3 6 5	3 17 11	3 7 6	3 15 10
South Australia .. ..	4 0 5	3 4 4	4 5 8	3 6 1	3 18 9
Western Australia .. ..	3 18 8	3 1 1	4 5 3	3 2 4	3 16 4
Tasmania .. ..	4 1 0	3 7 4	4 11 4	3 9 7	4 0 5
<b>Total .. ..</b>	<b>3 19 7</b>	<b>3 8 9</b>	<b>4 1 2</b>	<b>3 9 10</b>	<b>3 18 4</b>

(a) See § I, p. 831.

4. State Public Debt, 1939 and 1954 to 1958.—In the following table, the debt of each State and the amounts outstanding per head of population at 30th June, 1939 and 1954 to 1958 are shown.

## STATE PUBLIC DEBT.

30th June—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
DEBT. (£'000.)(a)							
1939 .. ..	359,844	179,698	127,503	108,887	95,473	26,367	897,772
1954 .. ..	614,495	376,964	220,396	213,619	165,783	97,691	1,688,948
1955 .. ..	655,599	411,199	236,474	234,769	177,881	109,805	1,825,727
1956 .. ..	698,136	445,713	252,799	254,423	188,733	122,223	1,962,027
1957 .. ..	742,696	481,819	269,320	274,913	205,145	132,584	2,106,477
1958 .. ..	787,462	518,213	285,947	294,821	218,428	143,061	2,247,932
DEBT PER HEAD OF POPULATION. (£ s. d.)(a)							
1939 .. ..	130 18 7	95 13 3	125 4 11	182 10 6	203 2 4	111 1 2	129 3 11
1954 .. ..	179 9 10	153 14 4	167 3 9	268 0 0	259 2 7	316 8 1	188 18 6
1955 .. ..	187 16 8	162 19 7	175 17 5	286 9 3	270 2 3	358 18 10	199 10 4
1956 .. ..	196 9 4	171 1 11	184 8 8	299 16 10	278 12 4	382 7 5	209 5 10
1957 .. ..	205 0 0	180 4 5	192 16 5	314 17 3	296 10 1	404 7 0	219 14 11
1958 .. ..	213 9 0	189 0 8	201 14 10	328 15 4	309 14 4	426 10 4	229 14 6

(a) See § 1, p. 831.

In some States, certain public utilities such as tramways, water supply and sewerage, harbour services, etc., are controlled by boards or trusts, which, in addition to receiving advances from the central Government, raise loans by public borrowing on their own behalf, while in other States these services are controlled by the central Government. Comparison of the debts of the States is therefore difficult, but on page 846 figures showing the aggregate debts of the States, including these local and semi-governmental authorities, are shown for the years 1938-39 and 1953-54 to 1957-58.

5. Public Debt and Interest Payable in Australian Currency.—In the foregoing tables relating to Commonwealth and State public debt, the debt outstanding in London is expressed in sterling, debt outstanding in New York and Canada is expressed in pounds converted from dollars at the rate of \$4.8665 to £1 and debt outstanding in Switzerland is expressed in pounds converted from Swiss francs at the rate of 1,000 Swiss francs = £A.102 1s. 10d. This method of showing the debt does not indicate the amount that the Australian Government would have to find to repay the debt at current rates of exchange. In the following tables, the public debt and the interest payable are shown in terms of Australian currency throughout. Debt in London, New York, Canada and Switzerland has been converted to Australian currency at the selling rate of exchange on 30th June.

**COMMONWEALTH AND STATE PUBLIC DEBT AND INTEREST PAYABLE  
AT 30th JUNE, 1957 : AUSTRALIAN CURRENCY.  
(£A.'000.)**

Particulars.	Maturing in—					Total.
	Australia.	London. (a)	New York. (b)	Canada. (c)	Switzer- land. (d)	
DEBT.						
<i>Commonwealth Debt—</i>						
War (1914-18) Debt ..	112,606	9,455	..	..	..	122,061
War (1939-45) Debt ..	1,334,093	7,185	..	..	..	1,341,278
Works and Other Purposes ..	299,297	61,132	136,180	7,056	12,383	516,048
<i>Total Commonwealth Debt</i>	<i>1,745,996</i>	<i>77,772</i>	<i>136,180</i>	<i>7,056</i>	<i>12,383</i>	<i>1,979,387</i>
<i>State Debt—</i>						
New South Wales ..	619,791	140,661	23,720	..	..	784,172
Victoria .. ..	439,556	48,643	7,678	..	..	495,877
Queensland .. ..	221,617	54,528	9,321	..	..	285,466
South Australia ..	241,315	39,233	5,122	..	..	285,670
Western Australia ..	174,411	37,130	2,516	..	..	214,057
Tasmania .. ..	125,752	8,140	759	..	..	134,651
<i>Total State Debt</i>	<i>1,822,442</i>	<i>328,335</i>	<i>49,116</i>	..	..	<i>2,199,893</i>
<i>Commonwealth and State Debt—</i>						
Short-term Debt .. ..	401,800	..	..	..	..	401,800
Other Debt .. ..	3,166,638	406,107	185,296	7,056	12,383	3,777,480
<i>Grand Total Commonwealth and State Debt</i> .. ..	<i>3,568,438</i>	<i>406,107</i>	<i>185,296</i>	<i>7,056</i>	<i>12,383</i>	<i>4,179,280</i>

(a) Converted at rate of £Stg.100 = £A.125 10s. (b) Converted at rate of \$2.2208 = £A.1.  
(c) Converted at rate of \$2.1167 = £A.1. (d) Converted at rate of 9.691 francs = £A.1.

COMMONWEALTH AND STATE PUBLIC DEBT AND INTEREST PAYABLE  
AT 30th JUNE, 1957 : AUSTRALIAN CURRENCY—*continued.*

(£A.'000.)

Particulars.	Maturing in—					Total.
	Australia.	London. (a)	New York. (b)	Canada. (c)	Switzer- land. (d)	
<b>ANNUAL INTEREST PAYABLE.</b>						
<i>Commonwealth Debt—</i>						
War (1914–18) Debt ..	3,930	286	..	..	..	4,216
War (1939–45) Debt ..	35,903	287	..	..	..	36,190
Works and Other Purposes ..	11,500	2,192	6,035	282	480	20,489
<i>Total Commonwealth Debt</i>	<i>51,333</i>	<i>2,765</i>	<i>6,035</i>	<i>282</i>	<i>480</i>	<i>60,895</i>
<i>State Debt</i>						
New South Wales ..	23,640	4,565	916	..	..	29,121
Victoria ..	17,306	1,608	310	..	..	19,224
Queensland ..	8,393	1,810	353	..	..	10,556
South Australia ..	9,383	1,263	212	..	..	10,858
Western Australia ..	6,667	1,135	102	..	..	7,904
Tasmania ..	4,981	274	34	..	..	5,289
<i>Total State Debt</i>	<i>70,370</i>	<i>10,655</i>	<i>1,927</i>	<i>..</i>	<i>..</i>	<i>82,952</i>
<i>Grand Total Commonwealth and State Debt</i>	<i>121,703</i>	<i>13,420</i>	<i>7,962</i>	<i>282</i>	<i>480</i>	<i>143,847</i>

(a) Converted at rate of £Stg.100 = £A.125 10s. (b) Converted at rate of \$2.2208 = £A1.  
(c) Converted at rate of \$2.1167 = £A.1. (d) Converted at rate of 9.691 francs = £A.1.

COMMONWEALTH AND STATE PUBLIC DEBT AND INTEREST PAYABLE  
AT 30th JUNE, 1958 : AUSTRALIAN CURRENCY.

(£A.'000.)

Particulars.	Maturing in—					Total.
	Australia.	London. (a)	New York. (b)	Canada. (c)	Switzer- land. (d)	
<b>DEBT.</b>						
<i>Commonwealth Debt—</i>						
War (1914–18) Debt ..	97,140	9,455	..	..	..	106,595
War (1939–45) Debt ..	1,190,558	7,097	..	..	..	1,197,655
Works and Other Purposes ..	301,506	60,837	150,140	6,603	12,379	531,465
<i>Total Commonwealth Debt</i>	<i>1,589,204</i>	<i>77,389</i>	<i>150,140</i>	<i>6,603</i>	<i>12,379</i>	<i>1,835,715</i>
<i>State Debt—</i>						
New South Wales ..	667,470	135,484	26,247	..	..	829,201
Victoria ..	475,104	48,408	9,893	..	..	533,405
Queensland ..	237,958	54,304	10,291	..	..	302,553
South Australia ..	261,108	38,856	6,002	..	..	305,966
Western Australia ..	187,373	37,061	3,326	..	..	227,760
Tasmania ..	135,941	8,115	1,426	..	..	145,482
<i>Total State Debt</i>	<i>1,964,954</i>	<i>322,228</i>	<i>57,785</i>	<i>..</i>	<i>..</i>	<i>2,344,367</i>
<i>Commonwealth and State Debt—</i>						
Short-term Debt ..	404,300	..	..	..	..	404,300
Other Debt ..	3,149,858	399,617	207,325	6,603	12,379	3,775,782
<i>Grand Total Commonwealth and State Debt</i>	<i>3,554,158</i>	<i>399,617</i>	<i>207,325</i>	<i>6,603</i>	<i>12,379</i>	<i>4,180,082</i>

For footnotes see next page.

COMMONWEALTH AND STATE PUBLIC DEBT AND INTEREST PAYABLE  
AT 30TH JUNE, 1958: AUSTRALIAN CURRENCY—*continued.*  
(£A.'000.)

Particulars.	Maturing in—					Total.
	Australia.	London. (a)	New York. (b)	Canada. (c)	Switzer- land. (d)	
ANNUAL INTEREST PAYABLE.						
<i>Commonwealth Debt—</i>						
War (1914-18) Debt ..	3,564	286	..	..	..	3,850
War (1939-45) Debt ..	31,303	284	..	..	..	31,587
Works and Other Purposes ..	12,266	2,182	6,713	264	480	21,905
<i>Total Commonwealth Debt</i>	<i>47,133</i>	<i>2,752</i>	<i>6,713</i>	<i>264</i>	<i>480</i>	<i>57,342</i>
<i>State Debt—</i>						
New South Wales ..	26,335	5,013	1,040	..	..	32,388
Victoria ..	19,267	1,601	416	..	..	21,284
Queensland ..	9,216	1,802	401	..	..	11,419
South Australia ..	10,495	1,250	257	..	..	12,002
Western Australia ..	7,371	1,132	142	..	..	8,645
Tasmania ..	5,504	273	65	..	..	5,842
<i>Total State Debt</i>	<i>78,188</i>	<i>11,071</i>	<i>2,321</i>	<i>..</i>	<i>..</i>	<i>91,580</i>
<b>Grand Total Commonwealth and State Debt</b> ..	<b>125,321</b>	<b>13,823</b>	<b>9,034</b>	<b>264</b>	<b>480</b>	<b>148,922</b>

(a) Converted at rate of £Stg.100 = £A.125 10s. (b) Converted at rate of \$2.2316 = £A.1.  
(c) Converted at rate of \$2.1425 = £A.1. (d) Converted at rate of 9.694 francs = £A.1.

6. **Public Debt at each Rate of Interest.**—The following tables show particulars of the amounts of debt for Commonwealth and State purposes at 30th June, 1957 and 1958, at each rate of interest:—

COMMONWEALTH AND STATE PUBLIC DEBT AT 30th JUNE, 1957 : AMOUNTS  
AT EACH RATE OF INTEREST.

Rate of Interest.	Maturing in—							Total.	
	Australia.		London.		New York.		Other Overseas.		
	Common-wealth.	State.	Common-wealth. (a)	State.	Common-wealth.	State.	Common-wealth.	Common-wealth.	State.
Per cent.	£A.'000.	£A.'000.	£Stg.'000	£Stg.'000	£'000.(b)	£'000.(b)	£'000.(b)	£'000.(b)	£'000.(b)
5.5 ..	..	..	6,951	..	..	..	..	6,951	..
5.0 ..	72,467	177,040	..	1	1,190	2,920	..	73,657	179,961
4.75 ..	..	..	..	..	22,704	..	..	22,704	..
4.625 ..	..	..	..	..	11,199	..	..	11,199	..
4.5 ..	163,900	613,581	..	11,790	261	4,876	..	164,161	630,247
4.2625 ..	65	..	..	..	..	..	..	65	..
4.25 ..	37	..	..	..	19,231	..	..	19,268	..
4.0 ..	48,647	142,851	5,725	22,488	..	904 (c)	9,195	63,567	166,243
3.875 ..	58	703	..	..	..	..	..	58	703
3.75 ..	58,114	173,172	..	..	3,303	1,664 (d)	6,125	67,542	174,836
3.625 ..	..	107	..	..	..	..	..	107	..
3.5 ..	..	6,805	5,737	45,948	1,085	6,973	..	6,822	59,726
3.4875 ..	..	2	..	..	..	..	..	2	..
3.375 ..	..	..	..	..	3,172	5,077	..	3,172	5,077
3.25 ..	744,982	146,178	33,767	56,802	..	..	..	778,749	202,980
3.2391 ..	..	13,153	..	..	..	..	..	13,153	..
3.125 ..	235,066	474,086	..	..	..	..	..	235,066	474,086
3.1 ..	..	3,731	..	..	..	..	..	3,731	..
3.0 ..	4	42,970	9,790	90,199	..	..	..	9,794	133,169
2.8347 ..	6,890	..	..	..	..	..	..	6,890	..
2.75 ..	..	..	..	15,950	..	..	..	..	15,950
2.7125 ..	..	417	..	..	..	..	..	..	417
2.5 ..	..	2	..	18,441	..	..	..	..	18,443
2.325 ..	..	1,728	..	..	..	..	..	..	1,728
1.5 ..	..	3,420	..	..	..	..	..	..	3,420
1.0 ..	401,800	35,636	..	..	..	..	..	401,800	35,636
Miscellaneous (e)	813	13	..	2	..	..	..	813	15
<b>Total Debt</b> ..	<b>1,745,996</b>	<b>1,822,442</b>	<b>61,970</b>	<b>261,621</b>	<b>62,145</b>	<b>22,414</b>	<b>15,320</b>	<b>1,885,431</b>	<b>2,106,477</b>

(a) Excludes War (1914-18) Debt due to United Kingdom Government, £79,724,000 (rate of interest 4.91667 per cent.). (b) See § 1, p. 831. (c) Swiss debt, £6,126,000; Canadian debt, £3,069,000. (d) Swiss debt. (e) Consists of overdue debt, War (1914-18) and (1939-45) Savings Stamps and National Savings Stamps, etc.

## COMMONWEALTH AND STATE PUBLIC DEBT AT 30th JUNE, 1958: AMOUNTS AT EACH RATE OF INTEREST.

Rate of Interest.	Maturing in—								Total.
	Australia.		London.		New York.		Other (Overseas).		
	Com-mon-wealth.	State.	Com-mon-wealth. (a)	State.	Com-mon-wealth.	State.	Com-mon-wealth.	State.	
Per cent.	£A.'000.	£A.'000.	£Stg.'000	£Stg.'000	£'000.(b)	£'000.(b)	£'000.(b)	£'000.(b)	£'000.(b)
6.0 ..	..	..	6,951	16,000	..	..	..	6,951	16,000
5.5 ..	..	..	..	..	..	..	..	..	..
5.0 ..	..	..	..	1	1,190	2,920	..	140,071	314,105
4.75 ..	138,881	311,184	..	..	30,659	4,285	..	45,466	32,499
4.625 ..	14,807	28,214	..	..	10,863	..	..	10,863	..
4.5 ..	161,382	613,581	..	11,790	256	4,781	..	161,638	630,152
4.2625 ..	59	..	..	..	..	..	..	59	..
4.25 ..	33	835	..	..	18,529	..	..	18,562	835
4.0 ..	32,046	265,498	5,655	22,343	..	737 (c)	9,033	46,734	288,578
3.875 ..	54	703	..	..	..	..	..	54	703
3.75 ..	11,055	67,820	..	..	3,148	1,586 (d)	6,125	20,328	69,406
3.625 ..	..	107	..	..	..	..	..	..	107
3.5 ..	..	6,730	5,667	45,834	1,069	6,896	..	6,736	59,460
3.4875 ..	..	2	..	..	..	..	..	..	2
3.375 ..	..	..	..	..	3,135	5,018	..	3,135	5,018
3.25 ..	606,630	110,700	33,602	56,510	..	..	..	640,232	167,210
3.2391 ..	10,626	..	..	..	..	..	..	10,626	..
3.125 ..	202,574	473,596	..	..	..	..	..	202,574	473,596
3.1 ..	..	3,661	..	..	..	..	..	..	3,661
3.0 ..	..	42,144	9,790	69,884	..	..	..	9,790	112,028
2.8347 ..	5,378	..	..	..	..	..	..	5,378	..
2.75 ..	..	..	..	15,950	..	..	..	..	15,950
2.7125 ..	..	377	..	..	..	..	..	..	377
2.5 ..	..	2	..	18,441	..	..	..	..	18,443
2.325 ..	..	1,543	..	..	..	..	..	..	1,543
1.5 ..	..	3,343	..	..	..	..	..	..	3,343
1.0 ..	404,300	34,874	..	..	..	..	..	404,300	34,874
Miscellaneous (e)	1,379	40	..	2	..	..	..	1,379	42
Total Debt ..	1,589,204	1,964,954	61,665	256,755	68,849	26,223	15,158	1,734,876	2,247,932

(a) Excludes War (1914-18) Debt due to United Kingdom £79,724,000 (rate of interest 4.91667 per cent). (b) See § 1, p. 831. (c) Swiss debt, £6,126,000; Canadian debt, £2,907,000. (d) Swiss debt. (e) Consists of overdue debt, War (1914-18) and (1939-45) Savings Stamps and National Savings Stamps, etc.

7. Dates of Maturity.—(i) *Commonwealth*. In the following tables the Commonwealth Public Debt at 30th June, 1957 and 1958 is classified according to the earliest and the latest years of maturity.

## COMMONWEALTH PUBLIC DEBT AT 30th JUNE, 1957(a) : CLASSIFIED ACCORDING TO EARLIEST AND LATEST YEARS OF MATURITY.

Year of Maturity.	Earliest Year.					Latest Year.				
	Maturing in—				Total.	Maturing in—				Total.
	Aus-tralia.	Lon-don.	New York.	Other Overseas.		Aus-tralia.	Lon-don.	New York.	Other Overseas.	
£A.'000.	£Stg.'000.	£'000 (b)	£'000. (b)	£'000. (b)	£A.'000.	£Stg.'000.	£'000 (b)	£'000. (b)	£'000. (b)	
Before 30th June.	..	..	..	..	..	..	..	..	..	..
1957	814,099	16,166	4,257	..	834,522	..	..	..	..	538,679
1957-58(c)	504,438	..	..	..	504,438	538,679	..	..	..	222,072
1958-59	..	..	..	..	..	222,072	..	..	..	220,494
1959-60	..	..	..	..	..	220,494	..	..	..	..
1960-61	66,309	5,725	..	..	72,034	200,874	16,166	..	..	217,040
1961-62	61,699	5,737	..	..	67,436	142,834	..	3,172	..	146,006
1962-63	96,515	..	..	..	96,515	84,447	..	..	..	84,447
1963-64	..	..	..	..	..	66,309	5,725	..	..	72,034
1964-65	17,451	292	..	(d) 6,125	23,868	72,734	..	..	..	72,734
1965-66	10,962	17,309	..	(d) 6,126	34,397	23,030	..	..	..	23,030
1966-67	11,192	..	..	..	11,192	11,192	5,737	1,085	..	18,014
1967-68	30,765	..	..	..	30,765	30,765	..	..	..	30,765
1968-69	71,374	..	..	..	71,374	71,374	..	..	..	77,500
1969-70	..	..	3,303	..	3,303	..	17,309	3,303 (d)	6,126	26,737
1970-71 and later	40,172	16,741	1,451	(e) 3,069	61,433	40,172	17,033	1,451 (e)	3,069	61,725
Miscellaneous (f)	21,020	..	g 53,134	..	74,154	21,020	..	g 53,134	..	74,154
Total ..	1,745,996	61,970	62,145	15,320	1,885,431	1,745,996	61,970	62,145	15,320	1,885,431

(a) See note (a) to previous table. (b) See § 1, p. 831. (c) Includes Short-term Debt. (d) Swiss debt. (e) Canadian debt. (f) Consists of advance loan subscriptions, overdue debt, debt repayable in half-yearly instalments, War Savings and Savings Certificates, War Savings Stamps, National Savings Stamps and Peace Savings Certificates. (g) International Bank Dollar Loans £51,537,000 being repaid in half-yearly instalments from 1st September, 1955 to 1st September, 1975, 1st June, 1957 to 1st December, 1972, 1st March, 1957 to 1st March, 1969, 15th September, 1957 to 15th March, 1970, 15th July, 1959 to 15th January, 1972, and from 1st June, 1964 to 1st December, 1966; and Serial Notes £1,597,000 to be repaid in half-yearly instalments from 31st December, 1960 to 30th June, 1964.

**COMMONWEALTH PUBLIC DEBT AT 30th JUNE, 1958(a) : CLASSIFIED  
ACCORDING TO EARLIEST AND LATEST YEARS OF MATURITY.**

Year of Maturity.	Earliest Year.					Latest Year.				
	Maturing in—				Total.	Maturing in—				Total.
	Aus- tralia.	Lon- don.	New York.	Other Overseas.		Aus- tralia.	Lon- don.	New York.	Other Overseas.	
£A.'000.	£Stg. '000.	£'000(b)	£'000.(b)	£'000.(b)	£A.'000.	£Stg. '000.	£'000(b)	£'000.(b)	£'000.(b)	
Before 30th June.										
1958 ..	657,769	16,106	4,204	..	678,079	..	..	..	..	678,079
1958-59(c) ..	413,578	..	..	..	413,578	610,111	..	..	..	610,111
1959-60 ..	9,158	..	..	..	9,158	181,072	..	..	..	181,072
1960-61 ..	77,996	5,655	..	..	83,651	180,561	16,106	..	..	196,667
1961-62 ..	58,153	5,667	..	..	63,820	128,752	..	3,135	..	131,887
1962-63 ..	94,257	..	..	..	94,257	83,177	..	..	..	83,177
1963-64 ..	..	..	..	..	..	64,386	5,655	..	..	70,041
1964-65 ..	20,208	292	..	(d) 6,125	26,625	71,980	..	..	..	71,980
1965-66 ..	10,582	17,204	..	(d) 6,126	33,912	21,662	..	..	..	21,662
1966-67 ..	36,671	..	..	..	36,671	36,671	5,667	1,069	..	43,407
1967-68 ..	29,899	..	..	..	29,899	29,899	..	..	..	29,899
1968-69 ..	70,802	..	..	..	70,802	70,802	..	(d) 6,126	..	76,928
1969-70 ..	..	..	3,148	..	3,148	..	17,204	3,148	(d) 6,125	26,477
1970-71 ..	10,222	6,951	256	(e) 2,907	20,336	10,222	..	256	(e) 2,907	13,385
1971-72 and later	82,380	9,790	2,042	..	94,212	82,380	17,033	2,042	..	101,455
Miscellaneous(f)	17,529	..	g 59,199	..	76,728	17,529	..	g 59,199	..	76,728
<b>Total ..</b>	<b>1,589,204</b>	<b>61,665</b>	<b>68,849</b>	<b>15,158</b>	<b>1,734,876</b>	<b>1,589,204</b>	<b>61,665</b>	<b>68,849</b>	<b>15,158</b>	<b>1,734,876</b>

(a) See note (a) to previous table. (b) See § 1, p. 831. (c) Includes short-term debt.  
 (d) Swiss debt. (e) Canadian debt. (f) Consists of advance loan subscriptions, overdue debt,  
 debt repayable in half-yearly instalments, War Savings and Savings Certificates, War Savings Stamps,  
 National Savings Stamps and Peace Savings Certificates. (g) International Bank Dollar Loans  
 £57,602,000 being repaid in half-yearly instalments from 1st September, 1955 to 1st September, 1975,  
 1st June, 1957 to 1st December, 1972, 1st March, 1957 to 1st March, 1969, 15th March, 1958 to 15th March  
 1970, 15th July, 1959 to 15th January, 1972, and from 1st June, 1964 to 1st December, 1966; and Serial  
 Notes £1,597,000 to be repaid in half-yearly instalments from 31st December, 1960 to 30th June, 1964.

(ii) States. Particulars of State Public Debt at 30th June, 1957 and 1958, have been  
 classified in the following tables according to the earliest and the latest years of maturity.

**STATE PUBLIC DEBT AT 30th JUNE, 1957 : CLASSIFIED ACCORDING TO  
EARLIEST AND LATEST YEARS OF MATURITY.**

Year of Maturity.	Earliest Year.				Latest Year.			
	Maturing in—			Total.	Maturing in—			Total.
	Aus- tralia.	London.	New York.		Aus- tralia.	London.	New York.	
£A.'000.	£Stg. '000.	£'000.(a)	£'000.(a)	£A.'000.	£Stg. '000.	£'000.(a)	£'000.(a)	
Before 30th June, 1957 ..	189,635	58,148	12,051	259,834	..	..	..	
1957-58 ..	285,895	..	..	285,895	284,410	20,090	..	304,500
1958-59 ..	1,669	13,935	..	15,604	33,909	20,708	..	54,617
1959-60 ..	2,732	..	..	2,732	74,488	..	..	74,488
1960-61 ..	106,924	11,790	..	118,714	63,508	18,438	..	81,946
1961-62 ..	195,328	23,399	..	218,727	47,903	..	5,077	52,980
1962-63 ..	315,290	12,670	..	327,960	210,203	11,790	..	221,993
1963-64 ..	4,076	9,790	..	13,866	106,722	..	..	106,722
1964-65 ..	59,912	12,896	..	72,808	235,231	12,670	..	247,901
1965-66 ..	62,972	64,887	..	127,859	168,059	9,790	..	177,849
1966-67 ..	63,811	..	..	63,811	63,811	23,399	6,974	94,184
1967-68 ..	130,171	15,950	..	146,121	130,171	25,484	..	155,655
1968-69 ..	205,147	..	..	205,147	205,147	..	..	205,147
1969-70 ..	3,242	18,441	1,663	23,346	3,242	41,244	1,663	46,149
1970-71 ..	44,683	..	4,876	49,559	44,683	11,006	4,876	60,565
1971-72 ..	2,177	12,175	2,920	17,272	2,177	15,950	2,920	21,047
1972-73 ..	2,711	..	..	2,711	2,711	..	..	2,711
1973-74 ..	3,336	..	..	3,336	3,336	12,175	..	15,511
1974-75 ..	4,378	..	..	4,378	4,378	31,337	..	35,715
1975-76 ..	76,128	4,351	..	80,479	76,128	..	..	76,128
1976-77 ..	6,001	..	..	6,001	6,001	..	..	6,001
1977-78 ..	7,088	..	..	7,088	7,088	4,351	..	11,439
1978-79 ..	7,809	..	..	7,809	7,809	..	..	7,809
1979-80 and later	16,388	..	..	16,388	16,388	..	..	16,388
Miscellaneous (b)	24,939	3,189	904	29,032	24,939	3,189	904	29,032
<b>Total ..</b>	<b>1,822,442</b>	<b>261,621</b>	<b>22,414</b>	<b>2,106,477</b>	<b>1,822,442</b>	<b>261,621</b>	<b>22,414</b>	<b>2,106,477</b>

(a) See § 1, p. 831. (b) Consists of overdue indefinite and interminable debt, debt due at  
 Treasurer's option and half-yearly drawings.

## STATE PUBLIC DEBT AT 30th JUNE, 1958: CLASSIFIED ACCORDING TO EARLIEST AND LATEST YEARS OF MATURITY.

Year of Maturity.	Earliest Year.				Latest Year.			
	Maturing in—			Total.	Maturing in—			Total.
	Aus- tralia.	London.	New York.		Aus- tralia.	London.	New York.	
£A.'000.	£Stg. '000.	£'000.(a)	£'000.(a)	£A.'000.	£Stg. '000.	£'000.(a)	£'000.(a)	
Before 30th June, 1958 ..	191,120	37,994	11,914	241,028	132,822	20,675	..	153,497
1958-59 ..	100,580	13,925	..	114,505	101,255	..	..	101,255
1959-60 ..	29,499	..	..	29,499	..	..	..	..
1960-61 ..	243,601	11,790	..	255,391	200,281	18,398	..	218,679
1961-62 ..	195,328	23,319	..	218,647	47,903	..	5,018	52,921
1962-63 ..	314,899	12,656	..	327,555	210,203	11,790	..	221,993
1963-64 ..	4,076	9,590	..	13,666	106,623	..	..	106,623
1964-65 ..	82,536	12,896	..	95,432	257,856	12,656	..	270,512
1965-66 ..	62,972	64,625	..	127,597	167,668	9,590	..	177,258
1966-67 ..	117,234	..	..	117,234	117,234	23,319	6,896	147,449
1967-68 ..	130,408	15,950	..	146,358	130,408	25,484	..	155,892
1968-69 ..	205,147	..	..	205,147	205,147	..	..	205,147
1969-70 ..	3,242	18,441	1,586	23,269	3,242	40,981	1,586	45,809
1970-71 ..	44,683	..	4,781	49,464	44,683	11,006	4,781	60,470
1971-72 ..	2,177	12,175	2,920	17,272	2,177	15,950	2,920	21,047
1972-73 ..	75,761	..	4,285	80,046	75,761	..	4,285	80,046
1973-74 ..	3,336	..	..	3,336	3,336	12,175	..	15,511
1974-75 ..	4,378	..	..	4,378	4,378	31,537	..	35,715
1975-76 ..	89,675	4,351	..	94,026	89,675	..	..	89,675
1976-77 ..	6,001	16,000	..	22,001	6,001	16,000	..	22,001
1977-78 ..	7,088	..	..	7,088	7,088	4,351	..	11,439
1978-79 ..	7,809	..	..	7,809	7,809	..	..	7,809
1979-80 ..	8,238	..	..	8,238	8,238	..	..	8,238
1980-81 and later	12,141	..	..	12,141	12,141	..	..	12,141
Miscellaneous(b)	23,025	3,043	737	26,805	23,025	3,043	737	26,805
<b>Total ..</b>	<b>1,964,954</b>	<b>256,755</b>	<b>26,223</b>	<b>2,247,932</b>	<b>1,964,954</b>	<b>256,755</b>	<b>26,223</b>	<b>2,247,932</b>

(a) See § 1, p. 831. (b) Consists of overdue indefinite and interminable debt, debt due at Treasurer's option and half-yearly drawings.

8. Short-term Debt.—(i) *Amount.* Particulars of the short-term debt (Treasury Bills and Debentures) of the Commonwealth and States in London and in Australia at 30th June, 1939 and at intervals from 30th June, 1954, to 30th June, 1958, are shown in the following table. This debt is included in the public debt as shown elsewhere.

## COMMONWEALTH AND STATE SHORT-TERM DEBT.(a)

Date.	Maturing in Australia. (£A.'000.).			Maturing in London. (£Stg.'000.)		
	Common- wealth.	States.	Total.	Common- wealth.	States.	Total.
30th June, 1939 ..	..	50,228	50,228	4,220	23,155	27,375
.. .. 1954 ..	190,000	..	190,000	470	22,868	23,338
.. .. 1955 ..	160,000	..	160,000	220	26,068	26,288
.. .. 1956 ..	165,000	..	165,000	..	26,068	26,068
30th September, 1956 ..	210,000	3,000	213,000	..	..	..
31st December, 1956 ..	270,000	14,000	284,000	..	..	..
31st March, 1957 ..	260,000	12,000	272,000	..	..	..
30th June, 1957 ..	150,000	..	150,000	..	..	..
30th September 1957 ..	185,000	3,000	188,000	..	..	..
31st December, 1957 ..	251,000	8,500	259,500	..	..	..
31st March, 1958 ..	241,000	6,000	247,000	..	..	..
30th June, 1958 ..	140,000	..	140,000	..	..	..

(a) Excludes Overdrafts and Internal Treasury Bills.

(ii) *Interest Rates.* (a) *London.* The rates of interest payable on Treasury Bills and Debentures in London during the following periods were : 1938-39—minimum rate, 2 per cent., maximum rate, 2½ per cent. ; 1949-50 to 1950-51—minimum rate, 2 per cent., maximum rate, 2½ per cent. On 8th November, 1951, the rates were increased to—minimum rate, 2½ per cent., maximum rate, 2¾ per cent.

(b) *Australia.* The Treasury Bill rates in Australia were as follows :—1½ per cent. from 1st January, 1935 ; 1½ per cent. from 1st May, 1940 ; 1½ per cent. from 1st May, 1943 ; 1 per cent. from 1st March, 1945 ; ¾ per cent. from 1st May, 1949 ; 1 per cent. from 1st August, 1952.

9. *State and Municipal and Semi-Governmental Authority Public Debt.*—For the reasons indicated on page 840, direct comparisons of the debts of the several States should be made with caution. The table following shows, for 1938-39 and 1952-53 to 1956-57, particulars of the debts of the States and the debts due to the public by municipal and semi-governmental authorities in each State.

STATE AND MUNICIPAL AND SEMI-GOVERNMENTAL AUTHORITY PUBLIC DEBT.

State.	State.	Municipal. (a)	Semi-Governmental. (a)	Total.	
DEBT. (£'000.) (b)					
1956-57.					
New South Wales .. .. .	742,696	68,972	202,191	1,013,859	
Victoria .. .. .	481,819	29,840	325,904	837,563	
Queensland .. .. .	269,320	66,159	53,623	389,102	
South Australia .. .. .	274,913	3,159	22,673	300,745	
Western Australia .. .. .	205,145	6,990	13,556	225,691	
Tasmania .. .. .	132,584	8,351	12,199	153,134	
Total	1956-57 .. .. .	2,106,477	183,471	630,146	2,920,094
	1955-56 .. .. .	1,962,027	170,839	570,068	2,702,934
	1954-55 .. .. .	1,825,727	158,712	505,710	2,490,149
	1953-54 .. .. .	1,688,948	141,642	440,602	2,271,192
	1952-53 .. .. .	1,543,648	126,086	382,835	2,052,569
	1938-39 .. .. .	897,772	78,126	120,512	1,096,410

DEBT PER HEAD OF POPULATION.

(£.) (b)

1956-57.

New South Wales .. .. .	205.0	19.0	55.8	279.8	
Victoria .. .. .	180.2	11.2	121.9	313.3	
Queensland .. .. .	192.8	47.4	38.4	278.6	
South Australia .. .. .	314.9	3.6	26.0	344.5	
Western Australia .. .. .	296.5	10.1	19.6	326.2	
Tasmania .. .. .	404.4	25.5	37.2	467.1	
Total	1956-57 .. .. .	219.7	19.1	65.7	304.5
	1955-56 .. .. .	209.3	18.3	60.7	288.3
	1954-55 .. .. .	199.5	17.4	55.2	272.1
	1953-54 .. .. .	188.9	16.0	49.2	254.1
	1952-53 .. .. .	175.8	14.4	43.5	233.7
	1938-39 .. .. .	129.2	11.2	17.4	157.8

(a) Due to the public and excludes amounts due to the Central Government. Includes bank overdrafts.  
(b) See § 1 p. 831.

## § 4. Commonwealth Loan Raisings.

1. **General.**—Under the Financial Agreement between the Commonwealth and the States, the Commonwealth is responsible for raising all loan moneys required either by the Commonwealth or by the State Governments. Details of loan transactions given in this section relate therefore, to all loans raised for the Commonwealth and the States.

2. **New Loans Raised, 1955-56 to 1957-58.**—(i) *Australia.* The following table shows details of new loans raised in Australia by the Commonwealth during the three years 1955-56 to 1957-58.

## COMMONWEALTH NEW LOANS(a) RAISED IN AUSTRALIA.

Month of Raising.	Amount Invited.	Amount Subscribed.	Rate of Interest per annum.	Year of Maturity.	Price of Issue per £100.	Allocation of Proceeds.		
						Commonwealth.		States.
						War (1939-45) etc.	Other Purposes.	
	£'000.	£'000.	%		£	£'000.	£'000.	£'000.
1955-56—								
August (Loan No. 94) ..	35,000	{ 16,050 16,408 7,173 8,519	{ 3 4½ 4½ 5	{ 1956 1965 1970 1956	{ 99 15s. 100 100 99 15s.	{ ..   ..	{ ..   17	{ ..   28,032
November (Loan No. 95) ..	30,000	{ 14,639 4,891 12,907	{ 4½ 4½ 3½	{ 1965 1970 1957	{ 100 100 99 10s.	{ ..  ..	{ ..  34	{ ..  33,000
May (Loan No. 97) ..	30,000	{ 20,127 76,000 17,205	{ 5 3½ 5	{ 1963 1957 1963	{ 99 10s. 99 10s. 99 10s.	{ ..  8,354	{ ..  36,003	{ ..  48,848
June (Loan No. 98) (b) ..	93,205							
1956-57—								
August (Loan No. 99) ..	30,000	{ 14,085 9,734 7,636 12,593	{ 3½ 5 5 4	{ 1957 1963 1976 1958	{ 99 15s. 99 15s. 100 99 10s.	{ ..   ..	{ ..   23	{ ..   31,432
October (Loan No. 101) ..	29,184	{ 7,998 9,506 12,202	{ 5 5 4	{ 1965 1976 1958	{ 100 100 100	{ ..  ..	{ ..  5	{ ..  30,092
March (Loan No. 102) ..	35,000	{ 14,008 10,092 40,000	{ 5 5 4	{ 1965 1976 1958	{ 100 100 100	{ ..  ..	{ ..  32	{ ..  36,270
June (Loan No. 104) (b) ..	99,000	{ 30,000 29,000 9,539	{ 5 5 4	{ 1965 1976 1959	{ 100 100 99 5s.	{ 7,115  ..	{ 31,931  28	{ 59,954  31,400
1957-58—								
August (Loan No. 105) ..	30,000	{ 15,637 6,252 14,468	{ 5 5 4	{ 1965 1976 1960	{ 100 100 99	{ ..  ..	{ 28  10	{ 31,400  32,550
November (Loan No. 107) ..	30,000	{ 9,909 8,183 10,807	{ 5 5 4	{ 1967 1973 1961	{ 100 100 98 17s.	{ ..  ..	{ 10  9	{ 32,550  39,241
April (Loan No. 109) ..	35,000	{ 5,370 23,073 31,000	{ 4½ 5 4	{ 1967 1973 1961	{ 99 100 98 17s.	{ ..  ..	{ 9  31,605	{ 39,241  52,133
June (Loan No. 111) (b) ..	92,000	{ 27,000 34,000 9,539	{ 4½ 5 4	{ 1967 1973 1959	{ 99 100 99 5s.	{ 8,262  ..	{ 31,605  28	{ 52,133  31,400

(a) Includes loans raised for redemption of Treasury Bills, but excludes conversion loans, loans for redemption of debt maturing in London, short-term debt and certain miscellaneous debt (see below). (b) Special issue. For details see following paragraph.

NOTE.—Minus sign (–) indicates an excess of allocations over receipts.

The loans of £93,205,000, £99,000,000 and £92,000,000 raised in June, 1956, 1957 and 1958 respectively were for the purpose of fulfilling an undertaking given by the Commonwealth that the States would have access to loan funds for their works programmes up to the approved Loan Council borrowing programmes. These programmes totalled £190,000,000 in 1955-56, £192,000,000 in 1956-57 and £200,000,000 in 1957-58. Subscriptions to these special loans came from the following sources.

## SPECIAL LOANS: SOURCE OF FINANCE.

	1955-56.	1956-57.	1957-58.
	£	£	£
National Debt Commission—			
Investment of Australian currency proceeds of			
International Bank Loan .. .. .	10,800,000	3,000,000	9,600,000
Swiss Loan Trust Account .. .. .	.. .. .	.. .. .	.. .. .
Canadian Loan Trust Account .. .. .	6,405,000	.. .. .	.. .. .
Loan Consolidation and Investment Reserve			
Trust Account .. .. .	62,000,000	96,000,000	82,400,000
Other Commonwealth Trust Moneys—Investment	14,000,000	.. .. .	.. .. .
Total .. .. .	93,205,000	99,000,000	92,000,000

Finance for the approved Loan Council programmes from 1955-56 to 1957-58 was provided from the following sources—

## LOAN COUNCIL PROGRAMME(a): SOURCE OF FINANCE.

	1955-56.	1956-57.	1957-58.
	£	£	£
Public Loans, domestic raisings, etc. .. .. .	98,808,000	98,822,000	105,900,000
Oversea Loans and Special Commonwealth			
Assistance .. .. .	91,192,000	93,178,000	94,100,000
Total .. .. .	190,000,000	192,000,000	200,000,000

(a) Excludes amounts provided for War Service Land Settlement; 1955-56, £8,354,000; 1956-57, £7,115,000; and 1957-58, £8,262,000 and for Emergency Wheat Storage 1955-56, £3,198,000.

In addition to the new loans raised, as shown in the foregoing tables, and the redemption and conversion loans shown in the following section, there were other miscellaneous debt operations during 1956-57 and 1957-58, namely:—Savings Certificates and War Saving Certificates (Five and Seven Years' Series), decreases of £3,323,000 and £4,039,000; War Savings and Savings Stamps, decreases of £1,000 each year; National Savings Bonds and Stamps, decreases of £1,000 each year; "Over the Counter Sales" (small amounts borrowed by the States by virtue of certain statutory rights) £1,211,250 and £3,299,600. Advance loan subscriptions in hand decreased from £7,943,000 at the end of 1955-56 to £3,516,000 at the end of 1956-57 and to £1,443,000 at the end of 1957-58.

(ii) *London.* No new loans were raised in London during the period 1955-56 to 1957-58.

(iii) *New York.* A cash loan was raised in New York in June, 1956, which was the first since May, 1928, except for loans raised from the International Bank for Reconstruction and Development (see para. 4, below). The following table gives details of the loans raised during the period 1955-56 to 1957-58.

## COMMONWEALTH NEW LOANS RAISED IN NEW YORK.

Month of Raising.	Amount of Loan.	Rate of Interest per annum.	Price of Issue per \$100.	Year of Maturity.	Allocation of Proceeds.	
					Commonwealth.	States.
	\$,000.	%	\$		\$'000.	\$'000.
1955-56—						
June .. .. .	6,972	4½	98.50	1971	1,270	5,702
1956-57—						
November .. .. .	7,771	4½	100	(a) 1960-64	(b) 7,771	..
March .. .. .	2,886	5	100	1972	488	2,398
1957-58—						
April .. .. .	25,000	4½	99	1973	4,145	20,855

(a) Repayable in half-yearly instalments.

(b) Proceeds used for Qantas Empire Airways Loan.

3. Conversion and Redemption Loans, 1955-56 to 1957-58.—(i) *Australia.* Particulars of conversion loans raised in Australia during the three years 1955-56 to 1957-58 are given in the following table :—

**COMMONWEALTH CONVERSION AND REDEMPTION LOANS RAISED IN AUSTRALIA.**

Month of Raising.	Old Loan.		New Loan.				Increase in Annual Liability for Interest.
	Amount.	Rate of Interest per annum.	Amount.	Rate of Interest per annum.	Price of Issue per £100.	Year of Maturity.	
	£A.'000.	%	£A.'000.	%	£		£A.'000.
1955-56—							
November ..	{ 23,407 106,081	{ 3½ 3	{ 32,297 41,815 39,589	{ 3 4½ 4½	{ 99 15s. 100 100	{ 1956 1965 1970	{ 1,059
June ..	6,795	3	{ 4,500 2,295	{ 3½ 5	{ 99 10s. 99 10s.	{ 1957 1963	{ 80
1956-57—							
August ..	{ 16,050 54,124 250	{ 3 3½ 3½	{ 20,888 22,157 13,044	{ 3½ 5 5	{ 99 15s. 99 15s. 100	{ 1957 1963 1976	{ 292
October ..	40,816	3	{ 18,204 12,661 5,614	{ 4 5 5	{ 99 10s. 100 100	{ 1958 1965 1976	{ 427
December ..	5,575	3	{ 2,800 2,775	{ 4 5	{ 99 12s. 6d. 100	{ 1958 1976	{ 84
March ..	141,931	3	{ 102,570 10,066 17,481	{ 4 5 5	{ 100 100 100	{ 1958 1965 1976	{ 1,217
1957-58—							
August ..	150,527	3½	{ 98,650 9,592 34,701	{ 4 5 5	{ 99 5s. 100 100	{ 1959 1965 1976	{ 516
November ..	75,293	3½	{ 21,457 26,233 7,913	{ 4 5 5	{ 99 100 100	{ 1960 1967 1973	{ 119
April ..	173,371	4	{ 108,578 10,651 26,577	{ 4 4½ 5	{ 98 17s. 6d. 99 100	{ 1961 1967 1973	{ -757

NOTE.—Minus sign (-) indicates reduction in liability for interest.

(ii) *London.* The following table shows particulars of loans raised in London during the years 1956-57 and 1957-58 for the purpose of redeeming and converting London loans. There were no loans raised for this purpose in 1955-56.

**COMMONWEALTH LOANS RAISED FOR THE CONVERSION AND REDEMPTION OF LOANS MATURING IN LONDON.**

Month of Raising	Old Loan.		New Loan.				Increase in Annual Liability for Interest and Exchange. (a)	
	Amount.	Rate of Interest per annum.	Amount raised in—		Rate of Interest per annum.	Price of Issue per £100.		Year of Maturity.
	£Stg.'000.	%	£A.'000.	£Stg.'000.	%	£	£A.'000.	
1956-57—								
July ..	(b) 3,200	5½/10	4,000	..	5	100	1963	-5
August ..	{ b 1,491 c 21,377	{ 2½ 2½	28,708	..	3½	99 15s.	1957	293
October ..	6,951	3½	..	6,951	5½	97 10s.	1972	153
1957-58—								
February ..	16,000	3	..	16,000	6	99 10s.	1976	602

(a) No account has been taken of the cost of issuing the conversion loans at a discount. Exchange calculated at £A. 125.375 = £Stg. 100. (b) Debentures. (c) Treasury Bills.

(iii) *New York.* During 1946–47, four loans totalling \$128,000,000 were raised in New York to redeem loans which became due for redemption or which the Commonwealth had the option of redeeming. No further loans were raised in New York for this purpose until December, 1954. The following table shows particulars of redemption loans raised in 1955–56 and 1956–57. There were no loans raised for this purpose in 1957–58.

**COMMONWEALTH LOANS RAISED IN NEW YORK FOR REDEMPTION OF EXISTING LOANS.**

Month of Raising.	Old Loan.		New Loan.				Increase in Annual Liability for Interest.(a)	
	Amount.	Rate of Interest per annum.	Amount.	Rate of Interest per annum.	Price of Issue per \$100.	Year of Maturity.	United States of America Currency.	Australian Currency.
	\$'000.	%	\$'000.	%	\$.		\$'000.	£A.'000.
1955–56— June ..	20,000	3½	18,028	4½	98.5	1971	161	(b) 72
1956–57— March ..	17,114	3½	17,114	5	100	1972	299	(c) 135

(a) The cost of issuing the new loans at a discount has not been taken into account. (b) Converted at selling rate of exchange on 30th June, 1956, \$2.2265 = £A1. (c) Converted at selling rate of exchange on 30th June, 1957, \$2.2208 = £A1.

4. **International Bank for Reconstruction and Development Loans.**—To provide dollar funds for the purchase of certain types of capital equipment and plant which were indispensable to the furtherance of development in Australia and which could be obtained only in the United States of America or Canada, the Commonwealth Government, in August, 1950, arranged a loan of \$100,000,000 from the International Bank for Reconstruction and Development. The loan is for a term of 25 years with interest at 4½ per cent. per annum on the amount of the loan withdrawn and outstanding from time to time. In addition, there is a commitment charge of ¾ per cent. per annum on the amount of the loan not withdrawn from time to time. Repayment of the loan is to be made in half-yearly instalments commencing on 1st September, 1955. The last instalment is payable on 1st September, 1975. At 31st December, 1953, the whole of the loan had been drawn.

In July, 1952, a further loan of \$50,000,000 was arranged. This loan is for a term of 20 years with interest at 4½ per cent. per annum on the amount of the loan withdrawn and outstanding from time to time. There is also a commitment charge of ¾ per cent. per annum similar to that of the previous loan. Repayment of the loan is to be made in half-yearly instalments from 1st June, 1957, to 1st December, 1972. At 30th September, 1954, the whole of the loan had been drawn.

In March, 1954, a third loan of \$54,000,000 was arranged. This loan is for a term of 15 years with interest and commitment charges similar to those for the previous loan for \$50,000,000. Repayment of the loan is to be made in half-yearly instalments from 1st March, 1957, to 1st March, 1969. At 30th September, 1955, the whole of the loan had been drawn.

In March, 1955, a fourth loan of \$54,500,000 was arranged. This loan is for a term of 15 years with interest at 4½ per cent. per annum. There is also a commitment charge of ¾ per cent. per annum similar to that of previous loans. Repayment is to be made in half-yearly instalments from 15th March, 1958, to 15th March, 1970. At 31st December, 1956, the whole of the loan had been drawn.

In November, 1956, a fifth loan of \$9,230,000 was arranged. This loan is for a term of 10 years with interest at 4½ per cent. per annum. There is also a commitment charge of ¾ per cent. per annum similar to that of previous loans. Repayment is to be made in half-yearly instalments from 1st June, 1964, to 1st December, 1966. Drawings to 30th June, 1957, amounted to \$921,000 and to 30th June, 1958 to \$8,309,000. The proceeds of this loan are being advanced to Qantas Empire Airways.

In December, 1956, a sixth loan of \$50,000,000 was arranged. This loan is for a term of 15 years with interest at 4½ per cent per annum. There is also a commitment charge of ¾ per cent. per annum similar to that of previous loans. Repayment is to be made in half-yearly instalments from 15th July, 1959, to 15th January, 1972. Drawings to 30th June, 1957, amounted to \$469,000 and to 30th June, 1958, to \$33,171,000.

The capital equipment and plant purchased from the proceeds of these loans are made available to Commonwealth and State Government departments and agencies and private firms and individuals for use in the development of Australian resources. Subject to a special import licence being obtained, the goods are imported and distributed through normal channels and payment made through the Australian banking system. Periodically, schedules of dollar payments for goods imported against loan licences are submitted to the International Bank for Reconstruction and Development. These schedules form the basis for periodical drawings by the Commonwealth against the loan. The amounts drawn are paid to the Commonwealth Bank to replace the dollar funds used in making the purchases. In return, the Commonwealth Government receives Australian currency from the Commonwealth Bank. This is paid to the Commonwealth National Debt Sinking Fund out of which the loans will subsequently be redeemed.

**5. Swiss Loan.**—To foster industrial development in Australia and to stimulate trade relations between the two countries, the Commonwealth Government arranged for the issue in Switzerland in November, 1953, and February, 1955, of two public loans each of 60,000,000 Swiss francs. The loans were underwritten by a Swiss banking group headed by the Swiss Bank Corporation, the Crédit Suisse and the Union Bank of Switzerland. Certain Swiss taxes connected with the issue and servicing of the loan were paid on an agreed basis by the Australian Government.

The first loan was for a period of 15 years with an option on the part of the Australian Government to repay the loan in full or in part after 12 years. The rate of interest was 4 per cent. and the issue price £99. Bondholders have the option of requiring payment either in Australian pounds or in the foreign currency equivalent of Australian pounds.

The second Swiss loan was for a period of 15 years with an option to redeem after 10 years. The rate of interest was 3½ per cent. and the issue price £99 10s. Bonds and interest are payable only in Swiss francs.

The loans were both fully subscribed and Swiss franc proceeds, after deducting borrowing expenses, were sold by the Commonwealth Government to the Commonwealth Bank in return for an equivalent amount of Australian currency. A trust account, named the Swiss Loan Trust Account, was opened and the proceeds from the two loans were transferred to this account and were used in assisting the Loan Council borrowing programmes for the 1953–54 and 1954–55 financial years. The Swiss Loan Trust Account will also be used as a sinking fund for the loans, and, when the time comes for repayment, the trust account investments can be realized. The provisions of the National Debt Sinking Fund Act do not apply to the loans.

**6. Canadian Loan.**—In October, 1955, the Commonwealth Government arranged for the issue in Canada of a public loan of 15,000,000 Canadian dollars raised to assist Australia's development programme. The loan was underwritten by Wood, Gundy & Company Limited of Toronto, Canada.

The loan was for a period of 15 years with an option on the part of the Australian Government to repay the loan in full or in part at any time prior to 1st November, 1970. The rate of interest was 4 per cent. payable half-yearly and the issue price \$98.50. Bonds and interest are payable in Canadian dollars.

The loan was fully subscribed and the net Canadian dollar proceeds were sold to the Commonwealth Bank for Australian currency. A trust account, named the Canadian Loan Trust Account, was opened and the Australian currency proceeds of the loan were transferred to this account and used in assisting the Loan Council borrowing programme in 1955–56.

The Canadian Loan Trust Account will provide the necessary sinking fund payments and, when the time comes for repayment, the Trust Account investments will be realized to provide funds for that purpose. The provisions of the National Debt Sinking Fund Act do not apply to this loan.

**7. Summary of Loan Transactions, 1953–54 to 1957–58.**—The following table contains a summary of loan transactions on behalf of the Commonwealth and State Governments during the five years 1953–54 to 1957–58.

## COMMONWEALTH LOAN TRANSACTIONS : SUMMARY.

Details.	Year ended 30th June—				
	1954.	1955.	1956.	1957.	1958.
<b>New Loans—</b>					
<b>New Loans (a) raised in—</b>					
Australia .. .. £A.'000.	198,383	175,753	193,919	196,854	195,236
New York(b) .. .. \$'000.	48,144	52,821	50,355	23,536	65,091
Switzerland .. .. Fracs '000.	60,000	60,000	..	..	..
Canada .. .. \$'000.	..	..	15,000	..	..
Miscellaneous Debt in Australia (c) .. .. £A.'000.	13,273	3,429	8,269	-3,214	1,229
<b>Net Increase in Short Term Debt—</b>					
Australia—Public .. .. £A.'000.	-35,000	-30,000	5,000	-15,000	-10,000
Internal .. .. £A.'000.	29,000	34,600	-8,200	20,200	12,500
London .. .. £Stg.'000.	-250	2,950	-220	-26,068	..
<b>Loans raised for Conversion or Redemption of existing Debt maturing in—</b>					
Australia .. .. £A.'000.	43,171	253,793	120,496	228,260	344,352
London—					
Raised in Australia .. .. £A.'000.	..	..	..	32,708	..
London .. .. £Stg.'000.	10,796	..	..	6,951	16,000
New York .. .. \$'000.	..	25,000	18,028	17,114	..

(a) Includes loans raised for redemption of Treasury Bills. No new loans were raised in London during this period. (b) Includes amounts drawn of \$100,000,000, \$50,000,000, \$54,000,000, \$54,500,000, \$9,230,000 and \$50,000,000, loans from International Bank for Reconstruction and Development. (c) "Over the Counter Sales", Instalment Stock, National Savings Bonds, War Savings and Savings Certificates and net increase in debt on account of advance loan subscriptions and, until the discontinuance of sales, War Savings and Savings Stamps and National Savings Stamps.

NOTE.—Minus sign (—) denotes a decrease in debt.

## § 5. National Debt Sinking Fund.

1. Commonwealth Public Debt.—Particulars relating to the creation of sinking funds are included in issues of the Official Year Book prior to No. 23.

The old sinking funds were merged in the National Debt Sinking Fund on 11th August, 1923. Particulars of receipts and expenditure of the Commonwealth Account for the years 1938-39 and 1953-54 to 1957-58 were as follows:—

NATIONAL DEBT SINKING FUND: COMMONWEALTH ACCOUNT.  
(£'000.)

Item.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>Receipts—</b>						
From Consolidated Revenue	3,918	18,154	14,115	15,412	15,292	14,301
Loans and Advances Repaid	17	2,276	2,007	2,212	2,986	2,881
War Service Homes Money Repaid .. ..	629	5,326	5,734	5,865	5,660	6,566
Half Net Profit Commonwealth Bank .. ..	321	2,127	2,835	3,112	3,918	4,961
Reparation Moneys .. ..	..	..	2,662	..	200	63
Interest on Investments .. ..	32	(a) 3,371	(a) 4,621	(a) 7,997	(a) 9,169	(a) 9,413
Loan (International Bank for Reconstruction and Development) Act .. ..	..	21,467	23,575	19,369	5,367	14,564
Other Contributions .. ..	14	6	3	2	2	1
<b>Total Receipts</b> .. ..	<b>4,931</b>	<b>52,727</b>	<b>55,552</b>	<b>53,969</b>	<b>42,594</b>	<b>52,750</b>
<b>Expenditure—</b>						
<b>Securities Repurchased and Redeemed in—</b>						
Australia .. ..	4,230	16,993	36,218	17,955	32,891	60,001
London .. ..	608	722	609	298	88	318
New York .. ..	214	8,998	4,488	(b) 1,525	(b) 3,031	(b) 5,172
<b>Total Expenditure</b> .. ..	<b>5,052</b>	<b>26,713</b>	<b>41,315</b>	<b>19,778</b>	<b>36,010</b>	<b>65,491</b>
Balance at 30th June .. ..	1,131	188,073	202,310	236,501	243,085	230,344
<b>Face Value of Securities Repurchased and Redeemed in—</b>						
Australia .. ..	4,199	18,561	37,312	19,149	34,718	61,017
London .. ..	498	593	492	240	85	305
New York .. ..	167	4,152	2,065	(b) 699	(b) 1,397	(b) 2,387
<b>Total Face Value</b> .. ..	<b>4,864</b>	<b>23,306</b>	<b>39,869</b>	<b>20,088</b>	<b>36,200</b>	<b>63,709</b>

(a) Includes interest received under National Debt Sinking Fund (Special Payment) Act 1951, £1,970,000 in 1953-54, £2,149,000 in 1954-55, £3,683,000 in 1955-56, £4,205,000 in 1956-57, and £3,936,000 in 1957-58. (b) Includes instalment repayments of loans from International Bank for Reconstruction and Development. 1955-56 net cost £1,407,000; face value, £645,000; 1956-57, net cost, £2,668,000; face value, £1,221,000; and 1957-58, net cost £4,733,000; face value £2,173,000.

2. State Public Debt.—(i) States, 1956-57 and 1957-58. A sinking fund for the redemption of the debt of the States was established under the Financial Agreement. Details of contributions to be made to this fund are given on page 832. Particulars of the transactions of the National Debt Sinking Fund (States' Account) for each State during the years 1956-57 and 1957-58 are shown below.

NATIONAL DEBT SINKING FUND: STATE ACCOUNT, 1956-57.

(£'000.)

Item.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>Receipts—</b>							
<b>Contributions under Financial Agreement—</b>							
Commonwealth .. .. .	1,651	1,054	576	607	455	297	4,640
States .. .. .	5,746	3,681	2,053	2,505	1,529	803	16,317
Interest from States on cancelled Securities .. .. .	3	3	1	1	1	..	9
Special Contributions by States .. .. .	80	6	..	2	1	1	90
Interest on Investments, etc. .. .. .	8	7	2	3	2	1	23
<b>Total Receipts .. .. .</b>	<b>7,488</b>	<b>4,751</b>	<b>2,632</b>	<b>3,118</b>	<b>1,988</b>	<b>1,102</b>	<b>21,079</b>
<b>Expenditure—</b>							
<b>Securities Repurchased and Redeemed in—</b>							
Australia .. .. .	7,376	4,829	2,507	2,545	1,942	1,113	20,312
London .. .. .	243	145	106	282	65	16	857
New York .. .. .	197	106	129	393	48	6	879
<b>Total Expenditure .. .. .</b>	<b>7,816</b>	<b>5,080</b>	<b>2,742</b>	<b>3,220</b>	<b>2,055</b>	<b>1,135</b>	<b>22,048</b>
<b>Balance at 30th June, 1957 .. .. .</b>	<b>186</b>	<b>254</b>	<b>106</b>	<b>141</b>	<b>55</b>	<b>124</b>	<b>866</b>
<b>Face Value of Securities Repurchased and Redeemed in—</b>							
Australia .. .. .	7,421	4,898	2,507	2,545	1,947	1,113	20,431
London .. .. .	241	144	105	246	57	16	809
New York .. .. .	94	51	62	181	24	3	415
<b>Total Face Value .. .. .</b>	<b>7,756</b>	<b>5,093</b>	<b>2,674</b>	<b>2,972</b>	<b>2,028</b>	<b>1,132</b>	<b>21,655</b>

NATIONAL DEBT SINKING FUND: STATE ACCOUNT, 1957-58.

Item.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>Receipts—</b>							
<b>Contributions under Financial Agreement—</b>							
Commonwealth .. .. .	1,787	1,155	631	668	497	327	5,065
States .. .. .	6,070	4,163	2,221	2,693	1,709	902	17,758
Interest from States on cancelled Securities .. .. .	3	3	2	2	1	..	11
Special Contributions by States .. .. .	80	5	..	105	1	2	193
Interest on Investments, etc. .. .. .	17	6	4	3	3	3	36
<b>Total Receipts .. .. .</b>	<b>7,957</b>	<b>5,332</b>	<b>2,858</b>	<b>3,471</b>	<b>2,211</b>	<b>1,234</b>	<b>23,063</b>
<b>Expenditure—</b>							
<b>Securities Repurchased and Redeemed in—</b>							
Australia .. .. .	2,503	5,221	2,646	2,818	2,079	1,300	16,567
London .. .. .	5,265	189	180	336	54	19	6,043
New York .. .. .	315	118	100	410	61	7	1,011
<b>Total Expenditure .. .. .</b>	<b>8,083</b>	<b>5,528</b>	<b>2,926</b>	<b>3,564</b>	<b>2,194</b>	<b>1,326</b>	<b>23,621</b>
<b>Balance at 30th June, 1958 .. .. .</b>	<b>60</b>	<b>58</b>	<b>38</b>	<b>48</b>	<b>72</b>	<b>32</b>	<b>308</b>
<b>Face Value of Securities Repurchased and Redeemed in—</b>							
Australia .. .. .	2,597	4,928	2,649	2,549	2,079	1,300	16,102
London .. .. .	4,125	187	179	300	55	20	4,866
New York .. .. .	149	57	48	189	30	3	476
<b>Total Face Value .. .. .</b>	<b>6,871</b>	<b>5,172</b>	<b>2,876</b>	<b>3,038</b>	<b>2,164</b>	<b>1,323</b>	<b>21,444</b>

(ii) All States, 1938-39 and 1953-54 to 1957-58. The following table is a summary of the transactions of the National Debt Sinking Fund (State Account) for the years 1938-39 and 1953-54 to 1957-58:—

**NATIONAL DEBT SINKING FUND: STATE ACCOUNT.**  
(£'000.)

Item.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Receipts—</i>						
<i>Contributions under Financial Agreement—</i>						
Commonwealth States .. .. .	1,478	3,463	3,947	4,310	4,640	5,065
Interest from States on cancelled Securities ..	4,327	12,357	13,680	15,416	16,317	17,758
Commonwealth Contributions under Federal Aid Roads and Works Act .. .. .	15	45	18	26	9	11
Special Contributions by States .. .. .	69	..	..	..	..	..
Interest on Investments, etc.	61	203	90	90	90	193
	56	33	16	32	23	36
<i>Total Receipts</i> .. .. .	<i>6,006</i>	<i>16,101</i>	<i>17,751</i>	<i>19,874</i>	<i>21,079</i>	<i>23,063</i>
<i>Expenditure—</i>						
<i>Securities Repurchased and Redeemed in—</i>						
Australia .. .. .	4,008	13,576	14,540	18,656	20,312	16,567
London .. .. .	1,722	1,362	898	329	857	6,043
New York .. .. .	347	4,792	2,688	773	879	1,011
<i>Total Expenditure</i> .. .. .	<i>6,077</i>	<i>19,730</i>	<i>18,126</i>	<i>19,758</i>	<i>22,048</i>	<i>23,621</i>
<i>Balance at 30th June</i> .. .. .	<i>1,885</i>	<i>2,094</i>	<i>1,719</i>	<i>1,835</i>	<i>866</i>	<i>308</i>
<i>Face Value of Securities Repurchased and Redeemed in—</i>						
Australia .. .. .	3,996	14,445	14,780	19,235	20,431	16,102
London .. .. .	1,561	1,154	732	275	809	4,866
New York .. .. .	285	2,214	1,236	356	415	476
<i>Total Face Value</i> .. .. .	<i>5,842</i>	<i>17,813</i>	<i>16,748</i>	<i>19,866</i>	<i>21,655</i>	<i>21,444</i>

**E. TAXES ON INCOME.**

NOTE.—The following section contains details of taxes on individuals and companies for the 1958-59 financial year.

1. **General.**—A description of the development of income taxes in Australia appeared in Official Year Book No. 35, page 926. Since July, 1942, the Commonwealth, under the uniform tax arrangement, has been the only authority imposing taxes on income. Taxes on income are assessed and imposed under the Income Tax and Social Services Contribution Assessment Act 1936-1958 and the Income Tax and Social Services Contribution Act 1958. The latter Act is an annual measure and its primary purpose is to declare the rates of tax and contribution payable for the financial year. The rates for the financial year are levied, in the case of individuals, on the income of that year and, in the case of companies, on the income of the preceding year. Thus tax for the financial year 1958-59 is levied on the income of individuals in 1958-59 and on the income of companies in 1957-58.

2. **Present Taxes.**—For individuals, a single tax known as the Income Tax and Social Services Contribution is levied. All companies are liable for primary income tax and in addition, private companies are subject to tax on undistributed income.

3. **Assessable Income.**—Income taxes in Australia are levied, primarily, on all income derived from Australian sources by any person, rather than on income derived from all sources by Australian residents. Thus a non-resident is taxed on income derived in Australia, while a resident is, in general, not taxed on income other than dividends derived from overseas, if the income is taxed in the country in which it is derived.

Certain types of Australian income are exempt from tax in Australia, the more important being (i) pensions, child endowment and other payments under the Social Services Act 1947-1958 and the Tuberculosis Act 1948, (ii) income from gold-mining and uranium mining, (iii) twenty per cent. of certain mining profits, (iv) dividends paid out of exempt mining profits, and (v) income received from a scholarship, bursary or other education allowance.

No amount is included in assessable income on account of a house occupied by its owner. Profits derived from the sale of property are not assessable income if such property was not purchased with a view to resale at a profit.

Expenses incurred in earning income, certain subscriptions to business associations, and trade union dues, are allowable deductions. Losses incurred in previous years may be carried forward as a deduction.

Because of uncongenial climatic conditions, isolation, and high cost of living, taxpayers living in certain areas are allowed an additional deduction. Two zones have been prescribed, and the allowances are:—Zone A, £270 plus an amount equal to one half of the total deductions allowable to the taxpayer for the maintenance of dependants; and Zone B, £45 plus an amount equal to one twelfth of the deductions allowable to the taxpayer for the maintenance of dependants. A deduction equal to the deduction allowed to residents of Zone A is also allowed to members of the defence forces serving for more than one half of the year of income at declared localities outside Australia.

Income Tax and Social Services Contribution is levied on the taxable income remaining after making these deductions and the concessional deductions to which reference is made in paragraph 4 following.

4. **Concessional Deductions.**—Concessional allowances for dependants, medical expenses, life assurance and superannuation contributions, etc., are made by way of a deduction from income. The maximum deduction allowed for each dependant, for a parent or parent-in-law, or for a housekeeper employed by the taxpayer for the financial year 1958–59 is shown in the following table.

**CONCESSIONAL DEDUCTIONS FOR DEPENDANTS, ETC.(a)**  
(£.)

Dependant, etc. (Resident).	Maximum Deduction.
Spouse .. .. .	143
Daughter-housekeeper (b) .. .. .	143
Housekeeper (b) having care of taxpayer's children under 16 years of age .. .. .	143
Parent or Parent-in-law .. .. .	143
One child under 16 years of age .. .. .	91
Other children under 16 years of age .. .. .	65
Invalid relative(c) .. .. .	91
Child 16 to 21 years receiving full-time education (d) .. .. .	91

(a) These deductions are allowed only if the dependant, parent or parent-in-law is a resident of Australia. If the dependant is maintained for part only of the year a partial deduction is allowed. (b) Of a widower or widow. (c) Child, step-child, brother or sister over 16 years of age. The amount of the deduction is reduced by any invalid pension received. (d) The amount of the deduction is reduced by the value of any assistance provided by the Commonwealth or a State.

When the dependant or person maintained derives separate income, the amount of the concessional deduction allowable is reduced as follows:—

In the case of a spouse or daughter-housekeeper, by £2 for every £1 by which the separate net income exceeds £65; for each parent or parent-in-law maintained, by £1 for each £1 of separate income; and for each dependent child or invalid relative, by £2 for every £1 by which the separate net income exceeds £52.

For the 1958–59 financial year, medical expenses paid by a taxpayer who is a resident, in respect of himself or dependants, including children under 21 years of age, up to £150 for each person, are allowed as a concessional deduction. Medical expenses include payments made to a legally qualified medical practitioner, nurse or chemist, or a hospital, in respect of an illness or operation, payments for dental services not exceeding £30 for any one person, payment for therapeutic treatment and eye tests, expenditure on medical or surgical appliances, artificial limbs or eyes, hearing aids and spectacles, and the remuneration of an attendant of a person who is blind or confined to bed or invalid chair.

Other concessional deductions allowed to resident taxpayers include, (i) payments of life, etc., insurance premiums and contributions to superannuation funds and friendly societies, not exceeding an aggregate of £300, (ii) payments to medical or hospital benefits funds, (iii) funeral expenses of a dependant not exceeding £30 and (iv) expenditure incurred for the full-time education of children or dependants who are less than 21 years of age (maximum £100 per child or dependant).

In addition to concessional deductions, all taxpayers (residents and non-residents) are allowed a deduction from income of rates and taxes on land which are annually assessed, gifts to charitable, benevolent or patriotic funds and one-third of amounts paid as calls to certain mining, forestry and oil-prospecting companies. Resident taxpayers only are allowed a deduction from income of the full amount paid as calls and as application and allotment moneys to certain companies engaged in the search for oil in Australia and New Guinea.

5. **Effective Exemptions from Tax.**—For the financial years 1950–51 to 1958–59, resident taxpayers without dependants were exempt from Income Tax and Social Services Contribution if their income did not exceed £104. The effect of the deductions for dependants was to exempt taxpayers up to the incomes shown hereunder.

**RESIDENT TAXPAYERS : EFFECTIVE EXEMPTIONS FROM TAX.**  
(£.)

Taxpayer with—	Income Tax and Social Services Contribution— Financial Years 1950–51 to 1952–53.	Income Tax and Social Services Contribution— Financial Years 1953–54 to 1956–57.	Income Tax and Social Services Contribution— Financial Years 1957–58 and 1958–59.
No dependants .. .. .	104	104	104
Wife .. .. .	208	234	247
Wife and one child .. .. .	286	312	338
„ „ two children .. .. .	338	364	403
„ „ three children .. .. .	390	416	468
„ „ four children .. .. .	442	468	533

For the 1958–59 financial year, an aged person (i.e., a man who has attained the age of 65 years or a woman who has attained the age of 60 years) is exempt from Income Tax and Social Services Contribution if his net income (i.e., gross income less expenses of earning that income) does not exceed £410. A married couple both of whom qualify by age for the concession, are exempt from tax if their combined net incomes do not exceed £819.

6. **Rates of Income Tax and Social Services Contribution on Individuals.**—The following table shows the rates of income tax and social services contribution for the financial years 1953–54 to 1958–59.

**INCOME TAX AND SOCIAL SERVICES CONTRIBUTION—INDIVIDUALS : RATES OF INCOME TAX AND SOCIAL SERVICES CONTRIBUTION—1953-54 TO 1958-59.**

Total Taxable Income.		1953-54.		1954-55 to 1958-59.	
Column 1.	Column 2.	Tax and Contribution on Amount in Column 1.	Tax and Contribution on each £1 of Balance of Income.	Tax and Contribution on Amount in Column 1.	Tax and Contribution on each £1 of Balance of Income.
Exceeding—	Not Exceeding—	£ s. d.	d.	£ s. d.	d.
£	£	£ s. d.	d.	£ s. d.	d.
Nil	100	Nil	1	Nil	1
100	150	0 8 4	4	0 8 4	3
150	200	1 5 0	9	1 0 10	7
200	250	3 2 6	13	2 10 0	11
250	300	5 16 8	17	4 15 10	15
300	400	9 7 6	22	7 18 4	20
400	500	18 10 10	28	16 5 0	26
500	600	30 4 2	33	27 1 8	30
600	700	43 19 2	38	39 11 8	34
700	800	59 15 10	42	53 15 0	38
800	900	77 5 10	46	69 11 8	42
900	1,000	96 9 2	50	87 1 8	46
1,000	1,200	117 5 10	56	106 5 0	52
1,200	1,400	163 19 2	64	149 11 8	59
1,400	1,600	217 5 10	71	198 15 0	65
1,600	1,800	276 9 2	78	252 18 4	71
1,800	2,000	341 9 2	85	312 1 8	77
2,000	2,400	412 5 10	93	376 5 0	85
2,400	2,800	567 5 10	100	517 18 4	92
2,800	3,200	733 19 2	107	671 5 0	99
3,200	3,600	912 5 10	114	836 5 0	105
3,600	4,000	1,102 5 10	121	1,011 5 0	111
4,000	4,400	1,303 19 2	128	1,196 5 0	117
4,400	5,000	1,517 5 10	136	1,391 5 0	124
5,000	6,000	1,857 5 10	144	1,701 5 0	132
6,000	8,000	2,457 5 10	151	2,251 5 0	139
8,000	10,000	3,715 12 6	158	3,409 11 8	145
10,000	16,000	5,032 5 10	165	4,617 18 4	152
16,000	upwards	9,157 5 10	168	8,417 18 4	160

For primary producers, the rate of Income Tax and Social Services Contribution for the current year is determined by the average of the taxable incomes for the five years up to and including the current year. A taxpayer may elect not to have these averaging provisions applied to his assessment, but the election once made, is irrevocable. The application of the averaging provisions is limited to that part of the taxable income which does not exceed £4,000, and when the taxable income exceeds £4,000, the balance is taxed at the ordinary rates applicable to that part. When the taxable income is less than £4,000, the rate of tax for averaging purposes is limited to the rate on a taxable income of £4,000.

Commencing with 1953-54, the taxable income, including any abnormal receipts, of actors, artists, composers and inventors, is taxed at the rate appropriate to the normal taxable income plus one-third of the abnormal receipts.

Interest on Commonwealth Loans issued prior to 1st January, 1940, is subject to the condition that it shall not be taxed at rates higher than those for 1930-31. Interest on Commonwealth Loans issued after 1st January, 1940, and interest on certain State semi-governmental loans issued free of State income tax are subject to a rebate of 2s. for each £1 included in the taxable income.

The minimum amount of Income Tax and Social Services Contribution payable is 10s. and the amounts payable and rebates are calculated to the nearest shilling.

7. **The Income Tax (International Agreements) Act 1953.**—This Act provided for relief from double taxation of incomes flowing between Australia and the United States of America. It also provided similar relief in respect of the United Kingdom, which had been covered by the Income Tax Assessment Act since 1947.

8. **Taxes on Specified Incomes.**—The following table shows the Income Tax and Social Services Contribution payable by taxpayers, with various incomes and numbers of dependants, on income derived in each year from 1951-52 to 1958-59 :—

**COMMONWEALTH TAXES ON INCOME.**  
(£.)

Income.	Income Tax and Social Services Contribution.				
	1951-52 Financial Year.	1952-53 Financial Year.	1953-54 Financial Year.	1954-55 to 1956-57 Financial Years.	1957-58 to 1958-59 Financial Years.
<b>INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH NO DEPENDANTS.</b>					
150 .. .. .	1.80	1.65	1.25	1.05	1.05
200 .. .. .	4.35	3.95	3.10	2.50	2.50
250 .. .. .	8.05	7.30	5.85	4.80	4.80
300 .. .. .	12.80	11.65	9.35	7.90	7.90
350 .. .. .	18.80	17.10	13.95	12.10	12.10
400 .. .. .	24.75	22.50	18.55	16.25	16.25
500 .. .. .	39.45	35.85	30.20	27.10	27.10
600 .. .. .	56.80	51.65	43.95	39.60	39.60
800 .. .. .	99.00	90.00	77.30	69.60	69.60
1,000 .. .. .	148.50	135.00	117.30	106.25	106.25
1,500 .. .. .	309.80	281.65	246.85	225.85	225.85
2,000 .. .. .	515.20	468.35	412.30	376.25	376.25
3,000 .. .. .	1,021.20	928.35	823.10	753.75	753.75
5,000 .. .. .	2,297.20	2,088.35	1,857.30	1,701.25	1,701.25
<b>INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH DEPENDENT WIFE.</b>					
150 .. .. .	..	..	..	..	..
200 .. .. .	..	..	..	..	..
250 .. .. .	1.70	1.55	0.75	0.65	0.50
300 .. .. .	4.10	3.75	2.00	1.60	1.25
350 .. .. .	7.70	7.00	4.20	3.60	2.80
400 .. .. .	12.45	11.30	7.25	6.05	5.25
500 .. .. .	24.25	22.05	15.80	13.75	12.65
600 .. .. .	38.85	35.30	26.70	23.85	22.40
800 .. .. .	76.15	69.25	55.05	49.50	47.65
1,000 .. .. .	121.90	110.80	90.70	81.85	79.55
1,500 .. .. .	271.85	247.15	209.30	191.35	188.20
2,000 .. .. .	469.40	426.75	366.25	334.55	330.35
3,000 .. .. .	964.00	876.35	765.15	700.10	694.75
5,000 .. .. .	2,224.70	2,022.45	1,783.60	1,634.10	1,627.35

COMMONWEALTH TAXES ON INCOME—*continued.*

(£.)

Income.	Income Tax and Social Services Contribution.				
	1951-52 Financial Year.	1952-53 Financial Year.	1953-54 Financial Year.	1954-55 to 1956-57 Financial Years.	1957-58 to 1958-59 Financial Years.
<b>INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH DEPENDENT WIFE AND ONE CHILD.</b>					
150	..	..	..	..	..
200	..	..	..	..	..
250	..	..	..	..	..
300	..	0.95	0.85	..	..
350	..	2.75	2.50	1.10	0.95
400	..	5.65	5.15	2.80	2.25
500	..	14.95	13.60	8.80	7.40
600	..	27.40	24.90	17.80	15.60
800	..	60.45	54.95	42.85	38.60
1,000	..	103.30	93.90	75.90	68.30
1,500	..	246.10	223.75	188.50	172.20
2,000	..	435.10	395.55	338.85	309.70
3,000	..	921.10	837.35	730.60	668.20
5,000	..	2,170.35	1,973.05	1,739.40	1,593.80

**INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH DEPENDENT WIFE AND TWO CHILDREN.**

150	..	..	..	..	..
200	..	..	..	..	..
250	..	..	..	..	..
300	..	..	..	..	..
350	..	0.90	0.80	..	..
400	..	2.65	2.40	1.10	0.90
500	..	9.55	8.70	5.30	4.35
600	..	20.70	18.80	13.05	11.25
800	..	50.90	46.30	35.70	32.10
1,000	..	91.50	83.20	66.80	60.10
1,500	..	228.90	208.15	174.60	159.40
2,000	..	413.45	375.85	321.95	294.35
3,000	..	893.70	812.45	708.95	648.25
5,000	..	2,134.15	1,940.15	1,709.95	1,566.90

**INCOME FROM PROPERTY.—TAXPAYER WITH NO DEPENDANTS.**

150	..	1.80	1.65	1.25	1.05	1.05
200	..	4.35	3.95	3.10	2.50	2.50
250	..	8.05	7.30	5.85	4.80	4.80
300	..	12.80	11.65	9.35	7.90	7.90
350	..	18.80	17.10	13.95	12.10	12.10
400	..	24.75	22.50	18.55	16.25	16.25
500	..	44.95	40.85	30.20	27.10	27.10
600	..	67.80	61.65	43.95	39.60	39.60
800	..	121.00	110.00	77.30	69.60	69.60
1,000	..	181.50	165.00	117.30	106.25	106.25
1,500	..	379.50	345.00	246.85	225.85	225.85
2,000	..	621.50	565.00	412.30	376.25	376.25
3,000	..	1,200.85	1,091.70	823.10	753.75	753.75
5,000	..	2,586.85	2,351.70	1,857.30	1,701.25	1,701.25

9. **Pay-as-you-earn.**—Individual taxpayers pay tax on a pay-as-you-earn basis. A similar scheme does not operate for companies.

(a) *Salary and Wage Earners.* Salary and wage earners are subject to instalment deductions for payment of tax at current rates out of weekly (or fortnightly) earnings. Employers are required to deduct tax and contribution from each payment of wages or salary to an employee at the appropriate rate, in accordance with a prescribed instalment scale. This scale shows the amount to be deducted according to the income and number of dependants of the employee.

Under the group scheme of deduction, which covers most employers of more than ten persons, the amount deducted is remitted to the Taxation Department, and after 30th June each year each employee is given a group certificate by his employer showing the amount of deductions made during the year. This certificate is forwarded to the Taxation Department with the employee's return of income for the year. If the tax assessed on the basis of this return is less than the amount shown on the group certificate, a refund is forwarded to the employee with his assessment. If the tax assessed is greater than the amount shown on the group certificate, the employee is required to pay the balance.

Under the stamp scheme used by small employers, a stamp deduction sheet in two parts is used. Each four weeks the employer purchases stamps (also in two parts) for the amount of the deductions made each pay day and sticks one part on each half of the sheet. At the end of the year, the employer gives the employee one half of the sheet and sends the other half to the Taxation Department. The employee's half is then used in the same way as a group certificate.

(b) *Taxpayers with Income other than Salary and Wages.* These taxpayers pay provisional tax in respect of income other than salary and wages. Collection of tax and contribution for the current year is made at the same time as collection and assessment for the previous year is adjusted. The notice of assessment shows an amount of provisional tax and contribution for the current year. This provisional amount is an approximation to the tax and contribution which will be payable after the return of income for the current year has been lodged. It is ascertained by assuming that the income of the current year will be the same as that for the previous year (for which a return has already been lodged) but the rates for the current year are applied to the income and not the rates for the year in which it was derived. The assessment notice shows the provisional tax and contribution paid in the previous year as a credit against the tax and contribution assessed on the basis of the return for that year. On receipt of his assessment, the taxpayer may elect to substitute his own estimate of income for the current year and pay tax on the basis of this estimate. To protect the revenue, a penalty is imposed if the taxpayer elects to pay provisional tax on an estimate of income more than 20 per cent. lower than the income of the previous year and he underestimates his income by more than 20 per cent.

An employee with income of £100 or more from sources other than salaries or wages is required to pay provisional tax in respect of that income.

10. **Lodgment of Returns and Assessment of Tax.**—All persons with assessable income in excess of £104 are required to lodge returns by the 31st July each year (31st August for business incomes). The Income Tax and Social Services Contribution payable is assessed, and assessment notices showing the amount payable are issued, during the year following the year of income (in most cases from September to June following the lodgment of the return). The approximate amount payable, however, has already been collected during the income year—from employees by deductions from wages and from non-employees by a provisional tax. The amount shown on the assessment notice is therefore adjusted against the amount already paid and any difference either collected or refunded.

11. **Company Income Taxes.**—(i) *General.* For taxation purposes, companies are divided into two main groups—public and private. A private company is defined as a company in which all the issued shares are held by not more than twenty persons or which is capable of being controlled by not more than seven persons, and which is not a company in which the public is substantially interested or a subsidiary of a public company. All

other companies are regarded as public companies. Both public and private companies pay primary Income Tax and Social Services Contribution assessed on a taxable income ascertained on the same principles as for individuals.

Dividends received are assessable income, but resident companies receive a rebate at the average rate on the amount of dividends included in the taxable income. This rebate is not allowed to non-resident companies.

(ii) *Rates of Tax.* The rates of Primary Tax, in the case of public companies, and Primary and Additional Tax for private companies, for the financial years 1953-54 to 1958-59, are shown in the table below.

Super Tax and Undistributed Income Tax ceased to be levied on public companies in the 1951-52 financial year and Additional Income Tax and Social Services Contribution ceased in the 1953-54 financial year. For details see Official Year Book No. 39, page 846 and No. 40, page 743.

### RATES OF TAX : COMPANIES, 1953-54 TO 1958-59 FINANCIAL YEARS.

(Pence per £.)

Type of Company	Rate of Income Tax and Social Services Contribution—						Rate of Additional Tax on Undistributed Income.
	1953-54 to 1955-56.		1956-57.		1957-58 to 1958-59.		1953-54 to 1958-59.
	Up to £5,000.	On Remainder of Taxable Income.	Up to £5,000.	On Remainder of Taxable Income.	Up to £5,000.	On Remainder of Taxable Income.	Undistributed Amount—Additional Tax.
Private .. .. .	48	72	60	84	54	78	120
Co-operative .. .. .	60	84	72	96	66	90	..
Non Profit(a)—							
Friendly Society Dispensaries .. .. .	60	84	72	96	66	66	..
Other(b) .. .. .	60	84	72	96	66	90	..
Life Assurance—							
Mutual .. .. .	48	72	60	84	54	78	..
Other—							
(1) Mutual Income .. .. .	48	72	60	84	54	78	..
(2) Other Income(c) .. .. .	(d) 72	84	(d) 84	96	(d) 78	90	..
Other .. .. .	(d) 72	84	(d) 84	96	(d) 78	90	..
Interest paid to a Non Resident(e) .. .. .	84	84	96	96	90	90	..

(a) Incomes not exceeding £104 are exempt from tax. (b) Where the taxable income does not exceed £208 (1953-54 to 1955-56), £228 (1956-57) or £231 (1957-58 to 1958-59) the tax may not exceed one half (1953-54 to 1955-56, 1957-58 to 1958-59) or eleven-twentieths (1956-57) of the amount by which the taxable income exceeds £104. (c) The rate of 72d. (1953-54 to 1955-56), 84d. (1956-57) or 78d. (1957-58 to 1958-59) is levied on the amount by which the £5,000 exceeds the mutual income. (d) For non-resident companies dividends included in this part of the taxable income are taxed at 60d. (1953-54 to 1955-56), 72d. (1956-57) and 66d. per £1 (1957-58 to 1958-59). (A resident company is allowed a rebate of tax in respect of dividends received.) (e) If the non-resident is not a company, tax is paid only on income in excess of £104.

A private company incurs liability for additional tax on its undistributed income if it fails to make a sufficient distribution of income within a specified period after the close of the year of income. The tax is levied on the undistributed amount which, for practical purposes, is the taxable income less—

(a) Primary income tax and social services contribution payable ;

(b) Retention allowance (i.e., the proportion of the reduced distributable income which a company may retain without incurring liability for undistributed income tax) ; and

(c) Certain dividends paid by the company.

For the financial years 1953-54 to 1958-59, the retention allowance is the following proportion of the reduced distributable income :—

- On the first £1,000 or part, 50 per cent.
- On the next £1,000 or part, 40 per cent.
- On the next £1,000 or part, 35 per cent.
- On the next £1,000 or part, 30 per cent.
- On the balance, 25 per cent., and
- Ten per cent. of distributable income from property, except dividends from other private companies.

For the financial years 1953-54 to 1958-59, the reduced distributable income is calculated by deducting from the taxable income the primary tax payable and the amount of all property income included in taxable income. The additional tax on undistributed income was imposed at a flat rate of 10s. in the £1 on the undistributed amount.

12. *Yield of Income Taxes.*—(i) *Collections from Income Taxes.* The following table shows the collections of taxes imposed on income for the years 1938-39 and 1953-54 to 1957-58 :—

#### INCOME TAX COLLECTIONS.

(£'000.)

Year.	Total.		
	Commonwealth.(a)	State.(b)	Total.
1938-39 .. .. .	11,883	29,796	41,679
1953-54 .. .. .	528,181	92	528,273
1954-55 .. .. .	532,916	52	532,968
1955-56 .. .. .	573,988	74	574,062
1956-57 .. .. .	620,298	23	620,321
1957-58 .. .. .	650,419	33	650,452

(a) Includes Social Services Contribution, War Time (Company) Tax, Super Tax, Undistributed Profits Tax and Wool Deduction. (b) Amounts shown for years other than 1938-39 are arrears of State Income Taxes.

(ii) *Commonwealth Income Tax Assessed.* The amounts of Commonwealth Taxes assessed on the income of recent years are shown in the following table. The amounts are shown under the year in which most of the assessments were made, i.e., the year following the income year. Income taxes assessed on income for past years and for the years shown after the close of the normal assessing period, are not included.

#### COMMONWEALTH INCOME TAXES ASSESSED.

(£'000.)

Tax.	1939-40.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Individuals—						
Income Tax and Social Services Contribution .. .. .	(a) 7,423	(b) 379,760	351,147	320,174	316,027	346,355
Companies—						
Income Tax .. .. .	8,041	151,246	119,348	158,887	174,997	210,664
Additional Tax on Undistributed Income of Private Companies ..	688	5,824	4,266	4,001	3,654	2,951
<b>Total .. .. .</b>	<b>16,152</b>	<b>536,830</b>	<b>474,761</b>	<b>483,062</b>	<b>494,678</b>	<b>559,970</b>

(a) Income Tax.

(b) Includes assessments issued to 30th June, 1956.

(iii) *Commonwealth Income Tax and Social Services Contribution, 1956-57 Assessment Year.* The following tables show, for the 1956-57 assessment year, details of the number of taxpayers, income, and net income tax and social services contribution assessed for individuals and resident and non-resident companies.

**COMMONWEALTH INCOME TAX AND SOCIAL SERVICES CONTRIBUTION :  
1956-57 ASSESSMENT(a)—NUMBER OF TAXPAYERS, ACTUAL INCOME,  
TAXABLE INCOME AND NET INCOME TAX AND SOCIAL SERVICES CON-  
TRIBUTION ASSESSED—INDIVIDUALS.**

(Incomes derived in year 1955-56.)

Grade of Actual Income(b) and State or Territory of Assessment.	Number of Taxpayers.			Actual Income.	Taxable Income.			Net Income Tax and Social Services Contri- bution Assessed.
	Males.	Females.	Total.	Total.	Salary and Wages.	Other Income.	Total.	
	No.	No.	No.	£'000.	£'000.	£'000.	£'000.	
£ 105-199 ..	56,103	106,706	162,809	25,163	20,503	3,658	24,161	208
200-299 ..	76,130	130,289	206,419	51,924	40,636	7,835	48,471	911
300-399 ..	98,281	146,520	244,801	85,748	66,502	12,174	78,676	2,477
400-499 ..	111,205	162,648	273,853	123,450	92,285	18,707	110,992	4,822
500-599 ..	129,382	188,908	318,290	174,690	131,285	23,486	154,771	8,436
600-699 ..	175,333	128,006	303,339	197,022	140,390	27,385	167,775	10,570
700-799 ..	283,979	73,155	357,134	268,394	185,525	31,630	217,155	15,109
800-899 ..	353,543	41,564	395,107	335,696	230,950	33,767	264,717	20,164
900-999 ..	339,703	23,372	363,075	344,238	234,485	34,383	268,868	22,513
1,000-1,099 ..	275,184	15,426	290,610	304,436	202,429	33,361	235,790	21,376
1,100-1,199 ..	198,751	10,858	209,609	240,450	154,896	31,487	186,383	18,273
1,200-1,299 ..	143,173	7,895	151,068	188,243	116,181	29,704	145,885	15,327
1,300-1,399 ..	101,729	6,463	108,192	145,705	85,901	27,745	113,646	12,807
1,400-1,499 ..	71,154	4,951	76,105	110,112	60,757	25,722	86,479	10,365
1,500-1,999 ..	166,505	14,720	181,225	307,340	142,413	103,773	246,186	34,332
2,000-2,999 ..	84,575	10,990	95,565	227,855	66,630	125,193	191,823	35,939
3,000-3,999 ..	27,879	3,990	31,869	109,228	22,527	73,288	95,815	23,466
4,000-4,999 ..	12,947	1,932	14,879	66,107	12,034	47,029	59,063	17,166
5,000-9,999 ..	15,681	2,557	18,238	120,422	19,155	90,792	109,947	47,359
10,000-14,999 ..	2,161	425	2,586	30,750	4,350	24,006	28,356	13,491
15,000 and over	1,148	209	1,357	32,613	3,614	25,311	28,925	16,116
<i>Total Residents</i>	<i>2,724,546</i>	<i>1,081,584</i>	<i>3,806,130</i>	<i>3,489,586</i>	<i>2,033,448</i>	<i>830,436</i>	<i>2,863,884</i>	<i>345,227</i>
Central Office ..	8,145	5,114	13,259	40,093	6,573	28,816	35,389	12,216
New South Wales	1,008,960	416,194	1,425,154	1,326,710	809,400	281,795	1,091,195	130,858
Victoria ..	774,937	334,300	1,109,237	1,017,260	605,778	237,195	842,973	100,427
Queensland ..	383,272	128,648	511,920	441,122	232,614	121,010	353,624	41,298
South Australia	252,684	95,064	347,748	311,043	175,563	79,708	255,271	28,858
Western Australia	191,055	65,601	256,656	227,179	126,622	57,422	184,044	20,639
Tasmania	88,791	30,833	119,624	102,368	60,536	21,436	81,972	8,461
Nor. Territory ..	5,008	1,400	6,408	6,983	4,602	1,007	5,609	696
Aust. Cap. Ter.	11,694	4,430	16,124	16,828	11,760	2,047	13,807	1,774
<i>Total Residents</i>	<i>2,724,546</i>	<i>1,081,584</i>	<i>3,806,130</i>	<i>3,489,586</i>	<i>2,033,448</i>	<i>830,436</i>	<i>2,863,884</i>	<i>345,227</i>
<i>Total Non-Res- idents ..</i>	<i>2,532</i>	<i>2,343</i>	<i>4,875</i>	<i>6,405</i>	<i>770</i>	<i>4,971</i>	<i>5,741</i>	<i>1,128</i>
<b>Grand Total</b>	<b>2,727,078</b>	<b>1,083,927</b>	<b>3,811,005</b>	<b>3,495,991</b>	<b>2,034,218</b>	<b>835,407</b>	<b>2,869,625</b>	<b>346,355</b>

(a) Assessments in respect of 1955-56 incomes issued to 30th September, 1957. Assessments issued after that date are not included. (b) Actual income is defined briefly as 'Gross income including exempt income less expenses incurred in gaining that income'.

**COMMONWEALTH INCOME TAX AND SOCIAL SERVICES CONTRIBUTION,  
1956-57 ASSESSMENT(a)—NUMBER OF TAXPAYERS, ACTUAL INCOME,  
TAXABLE INCOME AND NET TAX ASSESSED—RESIDENT AND NON-  
RESIDENT COMPANIES.**

(Incomes derived in 1955-56.)

Grade of Taxable Income (b) and State or Territory of Assessment.		Number of Taxpayers.	Actual Income.	Taxable Income.	Net Tax Assessed.(c)
£	£	No.	£'000.	£'000.	£'000.
1-	999	10,610	5,497	3,584	904
1,000-	4,999	11,618	33,074	30,494	7,489
5,000-	9,999	4,914	37,456	34,479	9,332
10,000-	19,999	3,114	44,850	43,730	13,207
20,000-	49,999	2,301	73,421	71,293	22,817
50,000-	99,999	941	67,409	65,403	21,309
100,000-	199,999	522	74,493	72,499	23,957
200,000-	499,999	311	96,602	94,336	30,415
500,000-	999,999	81	58,795	53,621	18,860
1,000,000	and over	72	196,199	178,076	62,374
<i>Total</i>		<i>34,484</i>	<i>687,796</i>	<i>647,515</i>	<i>210,664</i>
Central Office		3,126	337,184	307,797	105,039
New South Wales		14,065	144,398	141,218	43,376
Victoria		9,465	106,183	103,337	31,539
Queensland		2,318	35,780	34,090	11,359
South Australia		3,235	33,670	33,013	9,949
Western Australia		1,356	19,767	17,498	5,932
Tasmania		728	9,409	9,234	3,203
Northern Territory		39	320	297	85
Australian Capital Territory		152	1,085	1,031	182
<i>Total</i>		<i>34,484</i>	<i>687,796</i>	<i>647,515</i>	<i>210,664</i>

(a) Assessments in respect of 1955-56 incomes issued to 31st December, 1957. Assessments issued after that date are not included. (b) Taxable income is the income remaining after deducting from assessable income all allowable deductions. (c) Excludes additional tax levied on the undistributed income of Private Companies £2,951,000.

(iv) *Commonwealth Income Tax on Residents—Grades of Income.*—Individual income taxes assessed on residents are distributed according to grades of actual income in the following table. The year shown in each case refers to the year in which assessment was made, i.e., the year following the income year. The figures relate only to assessments made on the income of the previous year during the normal assessing period. Assessments issued after the normal assessing period are not included.

COMMONWEALTH INCOME TAXES AND SOCIAL SERVICE CONTRIBUTIONS  
ON RESIDENT INDIVIDUALS IN GRADES OF ACTUAL INCOME.(a)

Grade of Actual Income.(b)	1953-54.		1954-55.		1955-56.		1956-57.	
	No. of Tax-payers.	Tax.						
£      £		£'000.		£'000.		£'000.		£'000.
105- 199 ..	171,542	333	166,549	258	164,808	214	162,809	208
200- 299 ..	236,185	1,545	220,238	1,181	216,963	965	206,419	911
300- 399 ..	267,598	3,790	247,650	2,903	248,479	2,521	244,801	2,477
400- 499 ..	309,511	7,403	281,456	5,614	280,227	4,984	273,853	4,822
500- 599 ..	338,499	11,574	329,867	9,645	322,109	8,521	318,290	8,436
600- 699 ..	386,310	16,830	339,308	12,540	314,943	10,737	303,339	10,570
700- 799 ..	512,708	27,291	472,930	21,129	406,000	16,723	357,134	15,109
800- 899 ..	387,149	25,140	428,201	23,229	417,227	21,140	395,107	20,164
900- 999 ..	248,599	19,636	308,464	20,564	343,406	21,132	363,075	22,513
1,000- 1,099 ..	290,659	30,365	382,728	33,422	257,924	18,807	290,610	21,376
1,100- 1,199 ..					174,712	15,032	209,609	18,273
1,200- 1,299 ..					118,569	12,084	151,068	15,327
1,300- 1,399 ..					79,891	9,478	108,192	12,807
1,400- 1,499 ..					56,835	7,787	76,105	10,365
1,500- 1,999 ..	86,565	22,042	101,130	21,930	134,831	26,067	181,225	34,332
2,000- 2,999 ..	65,865	32,713	70,043	30,330	79,743	30,953	95,565	35,939
3,000- 3,999 ..	27,722	25,628	27,762	22,690	28,800	21,499	31,869	23,466
4,000- 4,999 ..	13,877	19,983	13,155	16,681	13,592	15,799	14,879	17,166
5,000- 9,999 ..	17,527	49,956	16,995	42,617	17,428	39,381	18,238	41,359
10,000-14,999 ..	2,624	17,022	2,795	16,212	2,592	13,441	2,586	13,491
15,000-29,999 ..	1,302	15,094	1,286	13,716	1,246	11,857	1,156	10,972
30,000-49,999 ..	200	4,383	185	3,993	157	2,877	145	2,765
50,000 and over	63	2,412	57	2,532	68	2,735	56	2,379
Total ..	3,470,866	350,055	3,545,184	319,108	3,680,550	314,734	3,806,130	345,227

(a) Actual income is defined briefly as "Gross Income including exempt income less expenses incurred in gaining that income". (b) For the years prior to 1956-57 the grades of actual income were £105-200, 201-300, 301-400, etc. (c) Grades for years 1953-54 and 1954-55 were £1,001-£1,250 and £1,251-£1,500.

## CHAPTER XXII.

## AGRICULTURAL PRODUCTION.

NOTE.—Values of Australian oversea trade shown throughout this chapter are expressed as £A. f.o.b. port of shipment, except where otherwise indicated.

## § 1. Introductory.

In general, statistics in this chapter relating to agricultural production are derived from "census" returns supplied by approximately 250,000 farmers who utilize one acre or more of land for agricultural or pastoral purposes and the latest figures available are those for the year 1957-58. The returns are collected on a substantially uniform basis in all States at 31st March, each year, and relate to areas sown and crops produced in the previous twelve months. Where harvests are not completed by March (e.g. potatoes), provision is made in some States for a special collection after the harvest is completed and in others for the inclusion of the total estimated yield expected from the complete harvest. In cases where additional data are available from marketing authorities or other sources, these are used in conjunction with the "census" returns. The statistics published in this chapter are therefore shown in "agricultural" years. For most purposes, there will be little error involved in considering them as applying to years ending on 30th June.

## § 2. Progress of Agriculture.

1. **Early Records.**—In an "*Account of Live Stock and Ground under Crop in New South Wales, 19th August, 1797*", Governor Hunter gives the acreage of crops as follows:—Wheat, 3,361 acres; maize, 1,527 acres; barley, 26 acres; potatoes, 11 acres; and vines, 8 acres.

The following details of crops were collected in 1808:—Wheat, 6,874 acres; maize, 3,389 acres; barley, 544 acres; oats, 92 acres; peas and beans, 100 acres; potatoes, 301 acres; turnips, 13 acres; orchards, 546 acres; and flax and hemp, 37 acres.

A brief reference to the attempts at cultivation by the first settlers in New South Wales and to the discovery of suitable agricultural land on the Parramatta and Hawkesbury Rivers prior to the year 1813 and west of the Blue Mountains thereafter is contained in early issues of the Official Year Book. (*See No. 22, p. 670.*)

By the year 1850, the area of crops had increased to 491,000 acres, of which 198,000 acres were cultivated in what is now the State of New South Wales, and 169,000 acres in Tasmania. At the end of 1850, the area under cultivation in Victoria, which was then the Port Phillip District of New South Wales, was 52,190 acres.

The gold discoveries of 1851 and subsequent years had at first a very disturbing effect on agricultural progress, the area of crops declining from 491,000 acres in 1850 to 458,000 acres in 1854. The demand for agricultural products occasioned by the large influx of population was, however, soon reflected in the increased area cultivated, for at the end of 1858 the land under crop in Australia exceeded a million acres.

2. **Progress of Cultivation.**—The following table shows the area of crops in each of the States and Territories of Australia at decennial intervals since 1860-61 and during each of the eleven seasons 1947-48 to 1957-58. On page 871 there is a graph showing the area of crops in Australia from 1900-01 onward.

## AREA OF CROPS.

('000 Acres.)

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1860-61	246	387	4	359	25	153	..	..	1,174
1870-71	385	693	52	802	55	157	..	..	2,144
1880-81	606	1,549	114	2,087	64	141	..	..	4,561
1890-91	853	2,032	225	2,093	70	157	..	..	5,430
1900-01	2,447	3,114	458	2,370	201	224	..	..	8,814
1910-11	3,386	3,952	667	2,747	855	287	..	..	11,894
1920-21	4,465	4,490	780	3,231	1,805	297	..	2	15,070
1930-31	6,811	6,716	1,144	5,426	4,792	268	2	5	25,164
1940-41	6,375	4,467	1,734	4,255	4,027	254	..	6	21,118
1947-48	7,168	5,023	1,849	3,852	4,026	342	(a)	11	22,271
1948-49	5,711	4,645	1,953	3,757	4,215	345	(a)	10	20,636
1949-50	5,670	4,480	2,057	3,617	4,399	368	(a)	10	20,601
1950-51	4,761	4,351	2,077	3,676	4,650	290	(a)	6	19,811
1951-52	4,704	4,271	2,022	3,696	4,693	291	(a)	6	19,683
1952-53	4,837	4,286	2,422	3,581	4,816	303	(a)	6	20,251
1953-54	5,425	4,480	2,361	3,778	4,633	330	(a)	6	21,013
1954-55	5,394	4,394	2,593	3,895	5,112	301	1	5	21,695
1955-56	5,660	4,542	2,604	3,972	5,342	326	1	7	22,454
1956-57	5,789	3,637	2,469	3,979	5,232	288	1	5	19,400
1957-58	5,000	4,051	2,600	3,907	5,615	292	1	5	21,471

(a) Not available.

The progress of agriculture was practically uninterrupted from 1860-61 to 1915-16, when, as the result of a special effort to raise wheat during the 1914-18 War, 18.5 million acres were cultivated in Australia. After the termination of hostilities, the area continued to expand and rose steadily to the record area of 25.2 million acres in 1930-31. Thereafter, the slump in wheat prices seriously depressed the agricultural industry and the area of crops receded to just under 20 million acres in 1935-36.

By 1938-39, the industry had recovered from the depression and the total area under cultivation reached the high level of 23.5 million acres. Thereafter, as a result of war-time man-power shortages and shipping difficulties, the area declined to less than 16 million acres in 1943-44. After 1943-44, production gradually increased again until, in 1947-48, 22.3 million acres were sown to crops. This upward trend was reversed after 1948-49, largely because, as a result of the high prices for wool, many primary producers transferred from agricultural to pastoral production. In recent years, the area sown increased from 19.7 million acres in 1951-52 to 22.5 million acres in 1955-56, but in 1956-57, due largely to excessively wet conditions in the Eastern States, the area sown dropped to 19.4 million acres. In 1957-58, the area increased again to 21.5 million acres. As the area under wheat in Australia constitutes a large proportion of the total area cropped (51 per cent. during the ten years ended 1957-58), fluctuations in the latter follow broadly the same pattern as changes in wheat areas.

3. **Area under Sown Pastures.**—In all the States, there are considerable areas of grasses, mainly sown on land from which scrub has been cleared or on land which it is desired to rest from cultivation. These areas, which are not included in "area of crops", have expanded from about 5.3 million acres in 1929-30 to about 33.7 million acres in 1957-58.

4. **Australian Agricultural Council.**—Arising out of a conference of Commonwealth and State Ministers on agricultural and marketing matters, held at Canberra in December, 1934, a permanent organization known as the Australian Agricultural Council was formed. The Council consists of the Commonwealth Ministers for Primary Industry and for Territories and the State Ministers of Agriculture, with power to co-opt the services of other Commonwealth and State Ministers as required. The principal functions of the Council are:—(i) the promotion of the welfare and development of agricultural industries generally; (ii) exchange of information on agricultural production and marketing; (iii) the improvement

of the quality of agricultural products and the maintenance of high grade standards; (iv) to ensure, as far as possible, balance between production and available markets; and (v) organized marketing, etc.

In addition, a permanent Standing Committee on Agriculture was formed to advise the Council, to secure co-operation and co-ordination in agricultural research, to advise State and Commonwealth Governments on the initiation and development of agricultural research, and to secure co-operation between all Governments in respect of quarantine measures against pests and diseases of plants and animals.

### § 3. Distribution, Production and Value of Crops.

1. Area of Crops in States and Territories.—The following table shows the areas in the several States, the Northern Territory and the Australian Capital Territory of each of the crops for the season 1957-58.

#### AREA OF CROPS, 1957-58.

(Acres.)

Crop.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas	N.T.	A.C.T.	Aust.
<b>Cereals for Grain—</b>									
Barley—									
2 Row .. ..	45,366	334,076	152,174	1,155,558	63,180	7,733	..	..	1,758,087
6 Row .. ..	23,489	17,668	20,470	56,204	244,224	651	..	..	362,706
Maize .. ..	57,513	4,278	122,245	(a)	20	..	..	6	(b) 184,062
Oats .. ..	715,489	622,245	19,144	427,366	1,153,492	20,711	..	54	2,958,501
Panicum, Millet and Setaria .. ..	298	1,040	61,040	..	..	..	..	..	62,378
Rice .. ..	46,774	..	..	..	(a)	..	(a)	..	(b) 46,774
Rye .. ..	3,898	17,807	987	38,955	8,868	464	..	..	70,979
Sorghum .. ..	47,017	..	166,979	..	69	..	377	..	214,442
Wheat .. ..	2,257,398	1,834,842	460,639	1,331,302	2,957,206	5,884	..	528	8,847,799
Hay .. ..	554,780	870,958	68,842	290,926	338,983	110,164	..	2,696	2,237,349
Green Fodder ..	993,039 (c)	85,095	714,048 (d)	421,242	770,739	54,094	4	1,032	3,039,293
Other Stock Fodder ..	13,623	23,052	11,083	40,434	3,932	24,416	..	..	116,540
<b>Grass Seed—</b>									
Lucerne .. ..	24,880	(e)	1,164	21,271	(a)	..	..	(e)	(b) 47,315
Clover .. ..	10,149	7,191	..	7,277	16,890	493	..	..	42,000
Other .. ..	1,753	7,672	8,182	3,013	6,548	507	..	55	27,730
<b>Industrial Crops—</b>									
Broom Millet ..	3,213	197	349	..	..	..	..	..	3,759
Canary Seed ..	2,240	..	53,045	115	(a)	..	..	..	(b) 55,400
Cotton .. ..	..	..	10,364	..	(a)	..	..	..	(b) 10,364
Flax—									
For Fibre ..	..	5,550	..	1,410	1,002	..	..	..	7,962
For Linseed ..	2,251	4,091	90,255	221	549	..	..	..	97,367
Hops .. ..	..	435	..	..	(a)	1,441	..	..	(b) 1,876
Peanuts .. ..	686	..	34,739	..	(a)	..	156	..	(b) 35,581
Sugar-cane—									
For Crushing ..	10,734	..	364,985	..	(a)	..	..	..	(b) 375,719
Other (excluding fodder) .. ..	9,961	..	120,370	..	..	..	..	..	130,331
Sunflower Seed ..	..	142	5,977	..	..	..	..	..	6,119
Tobacco .. ..	1,193	3,252	7,493	..	1,266	..	..	..	13,204
Other .. ..	2	505	258	130	..	253	..	..	1,148
<b>Vegetables for Human Consumption—</b>									
Onions .. ..	498	5,368	4,296	694	415	37	..	9	11,317
Potatoes .. ..	17,326	49,846	14,400	6,260	8,322	21,696	4	92	117,946
Other Vegetables ..	49,339	39,833	36,611	10,952	7,620	18,971	124	101	163,551
<b>Vineyards—</b>									
Bearing .. ..	16,243	42,089	2,518	55,411	8,268	..	3	..	124,532
Not Bearing .. ..	741	2,678	303	2,028	755	..	..	..	6,505
<b>Orchards and other Fruit Gardens—</b>									
Bearing .. ..	70,503	48,392	27,152	25,821	18,612	21,321	48	88	211,937
Not Bearing .. ..	17,667	17,829	13,704	9,474	3,574	1,692	33	5	63,978
<b>Nurseries and Cut Flowers .. ..</b>	953	2,661	315	226	272	128	..	12	4,567
<b>All other Crops ..</b>	1,643	2,457	5,620	246	599	936	..	9	11,510
<b>Total Area ..</b>	<b>5,000,659</b>	<b>4,051,249</b>	<b>2,599,751</b>	<b>3,906,536</b>	<b>5,615,405</b>	<b>291,592</b>	<b>749</b>	<b>4,687</b>	<b>21,470,628</b>

(a) Not available for publication. Included in "All other Crops", except in respect of rice in the Northern Territory which is excluded from "Total Area". (b) Incomplete. See footnotes to individual States. (c) Excludes lucerne and oats for grazing. (d) Excludes lucerne for grazing. (e) Not available. Included in "All other Crops".

2. **Relative Areas of Crops in States and Territories.**—The proportion of each of the major crops cultivated in the various States and Territories to the total area of crops for the season 1957-58 is shown in the next table. In four of the States, namely, New South Wales, Victoria, South Australia and Western Australia, wheat-growing for grain is by far the most extensive crop. In Queensland, the most extensive crops are green fodder, wheat, and sugar-cane, and in Tasmania, hay and green fodder.

As pointed out previously, wheat is the main crop in Australia, the area thereof, for grain only, representing 41 per cent. of the total area of crops in 1957-58.

**RELATIVE AREAS OF CROPS, 1957-58.**  
(Per cent.)

Crop.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Wheat (Grain) ..	45.1	45.3	17.7	34.1	52.7	2.0	..	11.3	41.2
Green Fodder ..	19.9	a 2.0	27.5	b 10.8	13.7	18.5	0.5	22.0	14.2
Oats (Grain) ..	14.3	15.4	0.7	10.9	20.5	7.1	..	1.2	13.8
Barley (Grain) ..	1.4	8.7	6.6	31.0	5.5	2.9	..	..	9.8
Hay ..	11.1	21.5	2.6	7.4	6.0	37.8	..	57.5	10.4
Sugar-cane, Crushed ..	0.2	..	14.1	..	..	..	..	..	1.8
Total Orchards and Fruit Gardens ..	1.8	1.7	1.6	0.9	0.4	8.0	10.8	2.0	1.3
Sorghum ..	0.9	..	6.4	..	..	..	50.4	..	1.0
Maize (Grain) ..	1.2	0.1	4.7	..	..	..	..	..	0.8
Total Vineyards ..	0.3	1.1	0.1	1.5	0.2	..	0.4	..	0.6
Potatoes ..	0.3	1.2	0.6	0.2	0.1	7.4	0.5	2.0	0.5
All other ..	3.5	3.0	17.4	3.2	0.9	16.3	37.4	4.0	4.6
<b>Total ..</b>	<b>100.0</b>								

(a) Excludes lucerne and oats for grazing.

(b) Excludes oats for grazing.

3. **Area of Principal Crops in Australia.**—The area of the principal crops during each of the five seasons ended 1957-58, compared with the average for the ten years ended 1938-39, is shown hereunder:—

**AREA OF PRINCIPAL CROPS: AUSTRALIA.**  
(’000 Acres.)

Crop.	Average, ten years ended 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>Cereals for Grain—</b>						
Barley, 2 Row ..	428	1,482	1,391	1,510	1,705	1,758
Maize ..	295	179	170	168	182	184
Oats ..	1,393	2,137	2,574	3,354	2,556	2,959
Rice ..	22	39	39	41	50	47
Wheat ..	14,345	10,751	10,673	10,166	7,874	8,848
Hay ..	2,994	1,935	1,984	2,241	1,861	2,237
Green Fodder ..	1,272	2,415	2,733	2,649	2,685	3,039
<b>Vegetables for Human Consumption—</b>						
Onions ..	8	7	8	7	9	11
Potatoes ..	130	128	107	94	101	118
Other vegetables for human consumption ..	(a) 83	131	136	155	172	164
<b>Industrial Crops—</b>						
Cotton ..	43	9	8	13	11	10
Hops ..	1	2	2	2	2	2
Sugar-cane ..	332	482	502	499	499	506
Tobacco ..	12	8	10	11	12	13
Vineyards ..	118	138	136	135	132	131
Orchards ..	276	273	276	279	270	276
All other Crops ..	206	897	946	1,130	1,279	1,168
<b>Total ..</b>	<b>21,958</b>	<b>21,013</b>	<b>21,695</b>	<b>22,454</b>	<b>19,400</b>	<b>21,471</b>

(a) Incomplete. Market gardens and pulse only.

4. **Size Classification of Principal Crops.**—A special series of tabulations relating to rural holdings in Australia was compiled for 1955-56 and published in full detail in a series of mimeographed bulletins, *Size Classification of Rural Holdings, 1955-56*. Condensed tables also appear in the bulletin *Primary Industries—Part I.—Rural Industries, No. 51*. The tables show a classification by size (area) of crop and size (area) of holding for wheat, oats, barley, sugar-cane, tobacco, potatoes, other vegetables for human consumption, vineyards, and orchard and non-orchard fruit.

5. **Weights and Measures.**—Details of the weights and measures used in recording production of agricultural commodities appear in the introduction to the bulletin *Primary Industries—Part I.—Rural Industries*.

6. **Production of Crops in States and Territories.**—The following table shows production of crops in the various States and Territories for the season 1957-58.

PRODUCTION OF CROPS, 1957-58.

Crop.	Unit of Quantity.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Cereals for Grain—</b>										
Barley—										
2 Row .. ..	'000 bus.	441	5,201	2,662	17,091	758	251	..	..	26,404
6 Row .. ..	" "	244	246	294	461	2,798	19	..	..	4,062
Maize .. ..	" "	2,237	241	3,161	(a)	..	..	..	..	(b) 5,639
Oats .. ..	" "	3,944	9,528	256	3,423	13,793	482	..	..	31,426
Panicum, Millet and Setaria	" "	1	19	1,024	..	..	..	..	..	1,044
Rice .. ..	" "	5,658	..	..	..	(a)	..	(a)	..	(b) 5,658
Rye .. ..	" "	11	85	11	152	63	5	..	..	327
Sorghum .. ..	" "	521	..	3,886	..	..	..	1	..	4,408
Wheat .. ..	" "	10,603	32,134	6,657	14,914	33,100	153	..	5	97,566
Hay .. ..	" tons	535	1,413	122	304	386	205	..	4	2,969
<b>Grass Seed—</b>										
Lucerne .. ..	cwt.	12,260	(c)	493	14,687	..	..	..	..	(b)27,440
Clover .. ..	" "	23,913	11,888	..	11,009	30,313	545	..	..	77,668
Other .. ..	" "	2,033	8,614	16,366	4,886	15,665	1,725	..	9	49,298
<b>Industrial Crops—</b>										
Broom Millet—										
Fibre .. ..	" "	19,793	845	1,463	..	..	..	..	..	22,101
Grain .. ..	bus.	19,626	1,099	..	..	..	..	..	..	20,725
Canary Seed .. ..	'000 bus.	..	..	259	1	(a)	..	..	..	(b) 260
Cotton, Unginned	'000 lb.	..	..	3,390	..	(a)	..	..	..	(b) 3,390
<b>Flax—</b>										
Straw .. ..	ton	..	9,923	..	3,077	1,246	..	..	..	14,246
Linseed .. ..	" "	36	1,149	7,279	49	68	..	..	..	8,581
Hops (Dry Weight)	cwt.	..	7,089	..	..	(a)	25,621	..	..	(b)32,710
Peanuts .. ..	" "	8,014	..	366,518	..	(a)	..	302	..	b 374,834
Sugar-cane for Crushing	'000 tons	303	..	8,946	..	..	..	..	..	9,249
Sunflower Seed .. ..	cwt.	..	1,087	29,481	..	..	..	..	..	30,568
Tobacco, Dried Leaf	'000 lb.	1,235	3,684	5,618	..	1,031	..	..	..	11,568
<b>Vegetables for Human Consumption—</b>										
Onions .. ..	ton	2,343	40,678	18,653	5,945	4,149	186	..	76	72,030
Potatoes .. ..	" "	66,689	251,159	56,468	49,965	49,229	101,500	3	420	575,433
<b>Vineyards—</b>										
Grapes—										
For Drying .. ..	" "	45,128	238,298	..	56,455	8,988	..	..	..	348,869
Table .. ..	" "	4,765	7,722	2,357	1,018	2,274	..	7	..	18,143
Wine .. ..	" "	23,496	13,388	141	141,559	4,707	..	..	..	183,291

(a) Not available for publication.

(b) Incomplete; see footnotes to individual States.

(c) Not available.

7. **Production of Principal Crops in Australia.**—The following table shows the production of the principal crops for the five years ended 1957-58, and the average for the ten years ended 1938-39.

## PRODUCTION OF PRINCIPAL CROPS : AUSTRALIA.

Crop.	Unit of Quantity.	Average, ten years ended 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>Cereals for Grain—</b>							
Barley, 2 Row ..	'000 bus.	7,480	35,923	25,622	35,469	43,870	26,404
Maize .. ..	" "	7,228	5,079	5,076	4,755	5,494	5,639
Oats .. ..	" "	16,437	32,961	32,834	56,487	35,396	31,426
Rice .. ..	" "	2,005	4,069	5,080	4,725	4,262	5,658
Wheat .. ..	" "	169,398	197,960	168,617	195,443	134,455	97,566
Hay .. ..	" tons	3,490	3,049	2,856	3,625	3,043	2,969
<b>Vegetables for Human Consumption—</b>							
Onions .. ..	" "	43	46	49	40	54	72
Potatoes .. ..	" "	351	548	468	402	519	575
<b>Industrial Crops—</b>							
Cotton, Unginned ..	" lb.	15,667	5,132	3,597	5,359	3,809	3,390
Hops, (dry weight) ..	cwt.	18,989	(a)24,666	(a)34,075	(a)34,374	(a)25,230	(a)32,710
Sugar-cane for Crushing	'000 tons	4,588	9,014	10,087	8,901	9,272	9,249
Tobacco (Dried leaf) ..	" lb.	5,113	7,669	6,822	6,106	8,709	11,568
<b>Vineyards—</b>							
Grapes .. ..	" tons	381	529	460	379	495	550
Wine made(b) .. ..	" gals.	16,104	31,666	23,964	22,895	30,743	33,854
Dried Vine Fruits .. ..	" tons.	70	90	81	59	80	91

(a) Excludes Western Australia. (b) Net factory and farm production of beverage and distillation wine excluding the liquid gallonage of spirits added in wine fortifying.

8. Yield per Acre of Principal Crops in Australia.—The following table shows the yield per acre for Australia of the principal crops for the five years ended 1957-58 and the average for the ten years ended 1938-39.

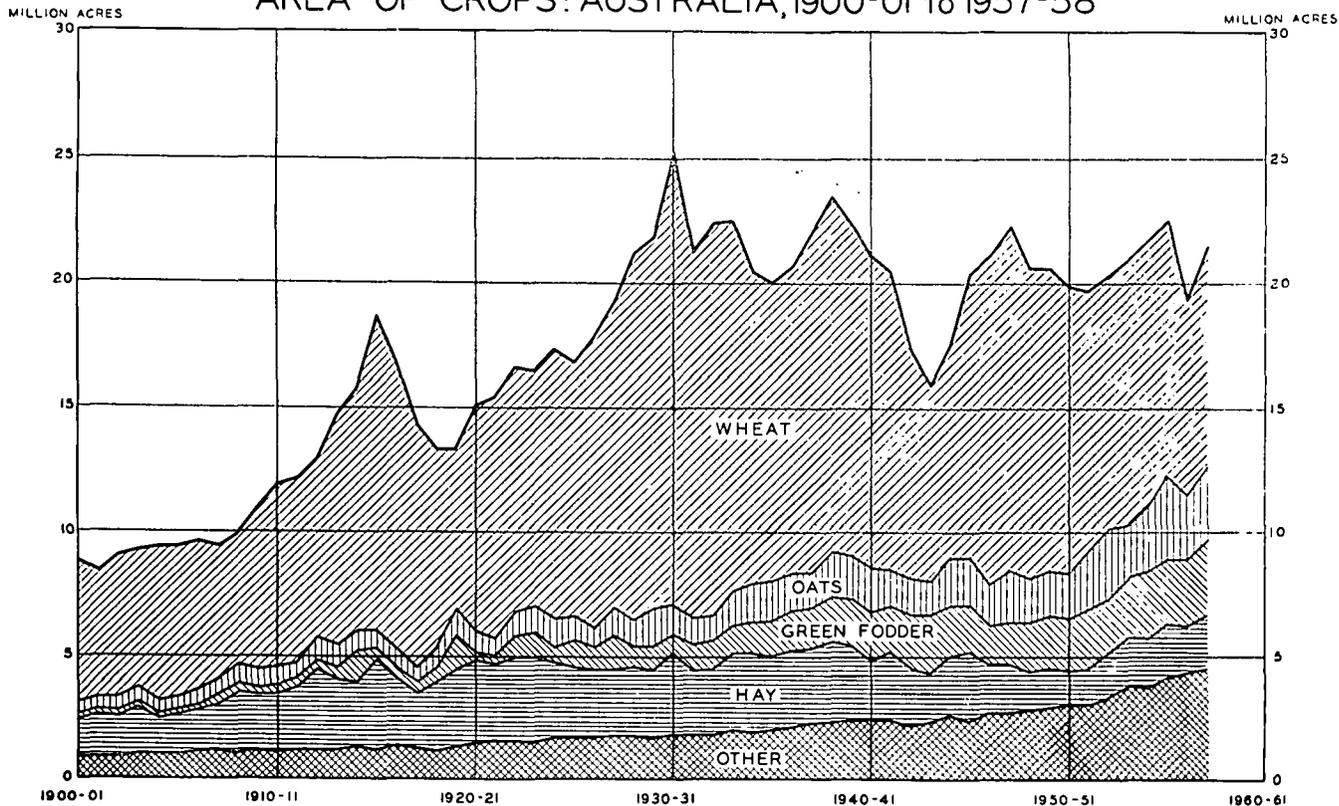
## YIELD PER ACRE OF PRINCIPAL CROPS : AUSTRALIA.

Crop.	Unit of Quantity.	Average, ten years ended 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>Cereals for Grain—</b>							
Barley, 2 Row .. ..	bushel.	17.5	24.2	18.4	23.5	25.7	15.0
Maize .. ..	" "	24.5	28.4	29.9	28.4	30.3	30.6
Oats .. ..	" "	11.8	15.4	12.8	16.8	13.8	10.6
Rice .. ..	" "	93.0	104.6	131.3	114.7	84.4	121.0
Wheat .. ..	" "	11.8	18.4	15.8	19.2	17.1	11.0
Hay .. ..	" ton	1.17	1.58	1.44	1.62	1.63	1.33
<b>Vegetables for Human Consumption—</b>							
Onions .. ..	" "	5.54	6.29	6.13	5.69	5.78	6.36
Potatoes .. ..	" "	2.71	4.27	4.36	4.29	5.14	4.88
<b>Industrial Crops—</b>							
Cotton, Unginned ..	" lb.	366	572	429	403	336	327
Hops (dry weight)(a) ..	cwt.	17.88	15.18	19.87	20.22	13.97	17.73
Sugar-cane for Crushing(a)	" ton.	19.24	26.47	26.95	23.88	25.05	24.62
Tobacco (Dried leaf) ..	" lb.	463	930	706	540	716	876
<b>Vineyards—</b>							
Grapes(a) .. ..	" ton	3.45	4.15	3.61	2.97	3.98	4.42

(a) Per acre of productive crops.

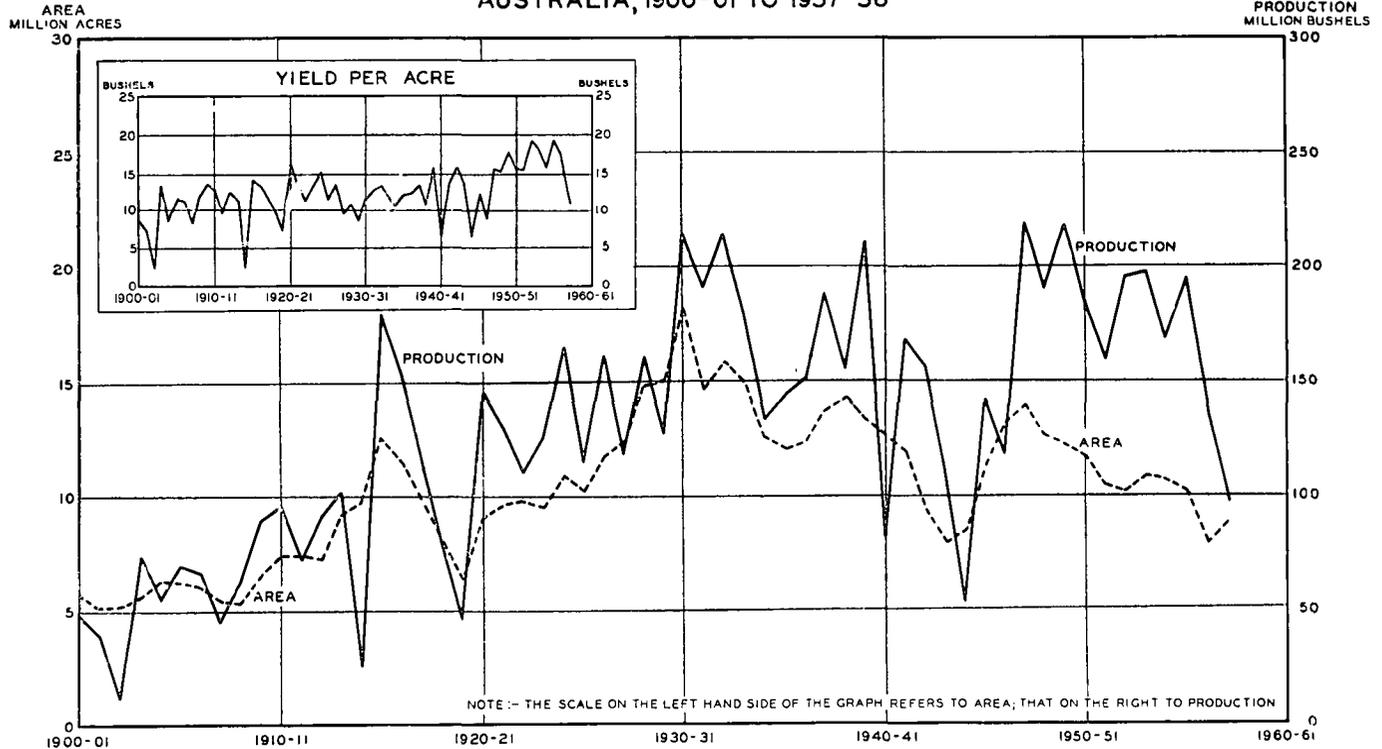
9. Gross Value of Principal Crops in Australia.—The following table shows the gross value of principal crops at the principal markets in Australia for the five years ended 1957-58 and the average for the ten years ended 1938-39.

# AREA OF CROPS: AUSTRALIA, 1900-01 to 1957-58



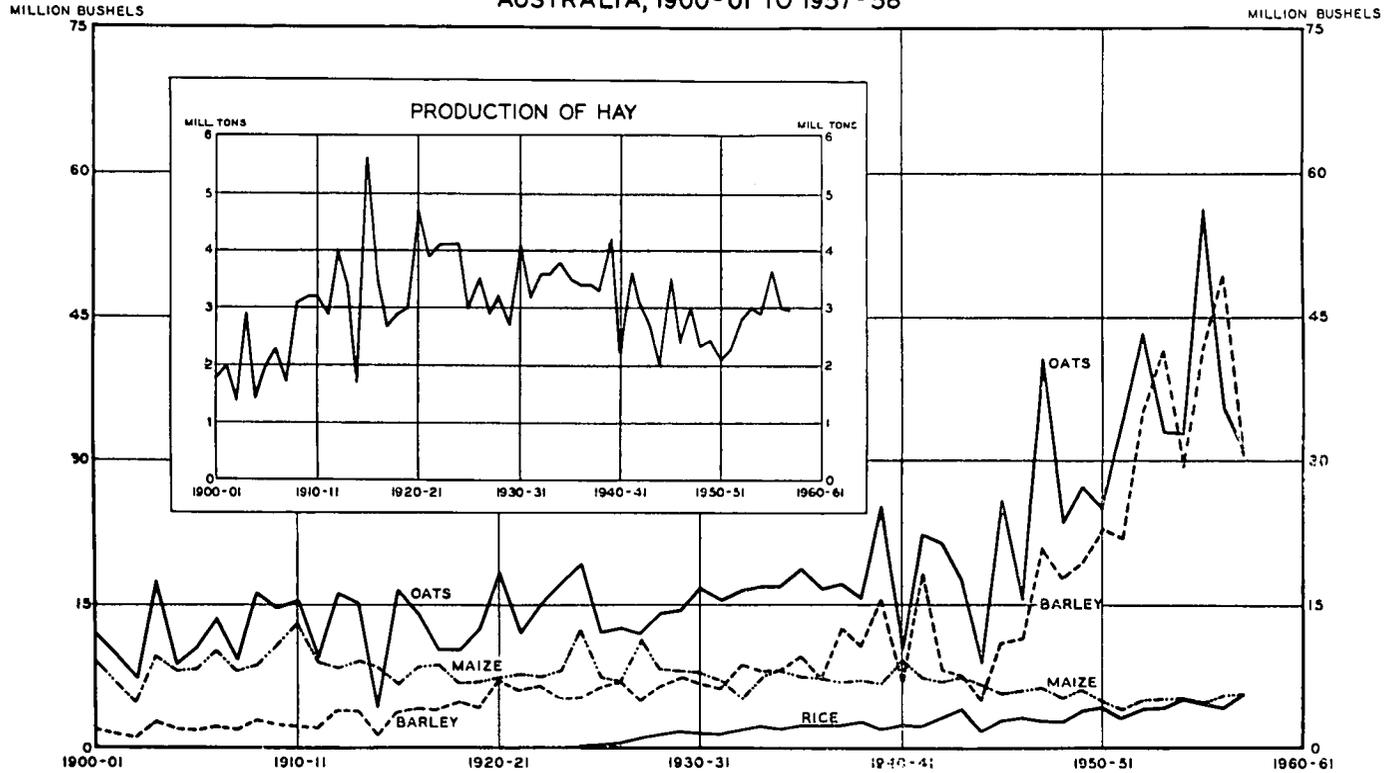
# WHEAT (GRAIN): AREA, PRODUCTION AND YIELD PER ACRE

AUSTRALIA, 1900-01 TO 1957-58



# PRODUCTION OF OATS, BARLEY, MAIZE, RICE AND HAY

AUSTRALIA, 1900-01 TO 1957-58





GROSS VALUE OF PRINCIPAL CROPS : AUSTRALIA.(a)  
(£'000.)

Crop.	Average ten years ended 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58. (b)
<b>Cereals for Grain—</b>						
Barley .. .. .	1,214	21,011	18,257	20,994	24,896	17,022
Maize .. .. .	1,537	3,868	3,615	3,464	3,732	4,995
Oats .. .. .	1,937	12,343	14,066	19,373	12,239	15,951
Rice .. .. .	392	3,198	3,430	3,406	3,069	4,153
Wheat .. .. .	30,125	138,135	107,528	126,091	92,647	66,870
Hay .. .. .	11,413	33,230	30,878	34,807	30,524	39,277
Green Fodder .. .. .	2,775	(d) 7,720	(d) 6,436	(d) 5,950	(d) 5,897	(d) 8,571
<b>Vegetables for Human Consumption—</b>						
Onions .. .. .	245	1,662	1,586	1,973	2,516	1,274
Potatoes .. .. .	2,314	12,075	13,449	25,895	17,955	9,969
Other vegetables for human consumption .. .. .	(e) 2,203	22,915	23,385	27,993	30,190	25,359
<b>Industrial Crops—</b>						
Cotton, Unginned .. .. .	298	316	208	307	224	213
Hops .. .. .	157	(d) 802	(d) 1,106	(d) 1,102	(d) 857	(d) 1,137
Sugar-cane .. .. .	7,895	39,619	39,706	35,786	40,718	47,346
Tobacco (Dried leaf) .. .. .	474	3,816	3,823	3,200	4,503	6,202
Grapes .. .. .	3,907	13,488	12,293	10,511	15,406	18,266
Fruit and Nuts .. .. .	7,953	46,415	46,568	48,349	49,898	59,152
All other Crops .. .. .	2,651	11,520	13,301	15,736	16,877	14,474
<b>Total Gross Value .. .. .</b>	<b>77,490</b>	<b>372,135</b>	<b>339,635</b>	<b>384,937</b>	<b>352,148</b>	<b>340,231</b>

(a) Excludes Northern Territory prior to 1954-55. Includes amounts paid as bounty, relief, &c.  
 (b) Subject to revision. (c) Incomplete, excludes Northern Territory. (d) Incomplete, excludes Western Australia. (e) Incomplete. Market gardens and pulse only.

10. Value of Production and Indexes of Price and Quantum of Production.—(i) *Gross and Net Values, 1956-57 and 1957-58.* Values of agricultural production for each State are shown for 1956-57 and 1957-58 in the following table. A more detailed reference to the value of production of agriculture and other industries in Australia as well as a brief explanation of the terms used will be found in Chapter XXX.—Miscellaneous.

In computing the net value of production, no deduction has been made for the cost of maintenance of farm buildings and fences, nor for the depreciation of farm plant; consequently, the figures are overstated to that extent.

GROSS, FARM AND NET VALUES OF AGRICULTURAL PRODUCTION.  
(£'000.)

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Value of Materials Used in Process of Production.		Net value of Production. (a)
				Seed used and Fodder for Farm Stock.	Value of other Materials used.	
1956-57.						
New South Wales .. .. .	67,455	13,643	53,812	2,703	(b) 2,684	48,425
Victoria .. .. .	86,141	13,194	72,947	4,853	4,292	63,802
Queensland .. .. .	81,014	8,598	72,416	2,631	9,658	60,127
South Australia .. .. .	64,997	9,446	55,551	2,487	3,376	49,688
Western Australia .. .. .	40,085	5,461	34,624	2,333	7,651	24,640
Tasmania .. .. .	12,244	2,144	10,100	1,520	(b) 602	7,978
Northern Territory .. .. .	58	..	58	..	..	58
Australian Capital Territory .. .. .	154	3	151	4	4	143
<b>Australia .. .. .</b>	<b>352,148</b>	<b>52,489</b>	<b>299,659</b>	<b>16,531</b>	<b>28,267</b>	<b>254,861</b>
1957-58.(c)						
New South Wales .. .. .	62,092	11,129	50,963	3,134	(b) 3,101	44,728
Victoria .. .. .	87,571	12,759	74,812	(d)	(d)	64,320
Queensland .. .. .	85,767	7,867	77,900	3,192	11,810	62,898
South Australia .. .. .	45,062	4,904	40,158	2,439	5,397	32,322
Western Australia .. .. .	43,639	5,421	38,218	2,751	8,169	27,298
Tasmania .. .. .	15,891	2,595	13,296	676	(b) 570	12,050
Northern Territory .. .. .	52	..	52	..	..	52
Australian Capital Territory .. .. .	157	2	155	1	5	149
<b>Australia .. .. .</b>	<b>340,231</b>	<b>44,677</b>	<b>295,554</b>	<b>(d)</b>	<b>(d)</b>	<b>243,817</b>

(a) No deduction has been made for depreciation and maintenance. (b) No allowance made for costs of power, power kerosene, petrol and other oils. (c) Subject to revision. (d) Not available separately.

(ii) *Net Values, 1929-30 to 1957-58.* In the following table, the net value of agricultural production and the net value per head of population are shown by States for the years 1953-54 to 1957-58 in comparison with the averages for the ten years ended 1938-39:—

## NET VALUE OF AGRICULTURAL PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Total.
NET VALUE.(a) (£'000.)									
Average, ten years 1929-30 to 1938-39	13,304	10,508	10,189	6,540	4,903	1,824	(b)	(b)	47,268
1953-54 .. ..	68,342	65,624	55,471	41,700	28,119	9,204	(b)	(b)	268,460
1954-55 .. ..	48,711	61,516	59,656	39,180	23,483	11,240	45	88	243,919
1955-56 .. ..	63,647	66,465	55,361	41,271	37,350	15,170	42	149	279,455
1956-57 .. ..	48,425	63,802	60,127	49,688	24,640	7,978	58	143	254,861
1957-58(c) .. ..	44,728	64,320	62,898	32,322	27,298	12,050	52	149	243,817

## NET VALUE PER HEAD OF POPULATION. (£ s. d.)

Average, ten years 1929-30 to 1938-39	5 1 2	5 14 11	10 13 0	11 3 10	11 0 9	7 18 5	(b)	(b)	7 1 4
1953-54 .. ..	20 1 4	27 1 8	42 13 1	53 1 1	44 11 8	29 14 11	(b)	(b)	30 6 4
1954-55 .. ..	14 1 7	24 14 6	45 0 3	48 10 5	36 3 9	35 18 3	2 14 6	2 16 4	26 16 8
1955-56 .. ..	18 1 2	25 18 3	40 18 7	49 9 2	55 16 6	47 10 6	2 8 1	4 8 7	29 19 11
1956-57 .. ..	13 9 11	24 3 4	43 11 1	57 13 8	35 19 11	24 9 3	3 3 3	3 19 5	26 14 7
1957-58(c) .. ..	12 4 6	23 15 2	44 16 5	36 9 8	39 1 7	36 1 4	2 14 8	3 15 10	25 0 4

(a) No deduction has been made for depreciation and maintenance. (b) Not available. (c) Subject to revision.

(iii) *Indexes of Quantum and Price of Agricultural Production.* Indexes of quantum and price of agricultural production are shown in the following table. The quantum indexes relate to gross output of farm products valued at constant prices. The quantities of each farm product produced each year have been re-valued at the unit gross value for the period 1936-37 to 1938-39. The price indexes relate to average "prices" of farm products realized at the principal markets of Australia. Average quantities of each product marketed in the period 1946-47 to 1950-51 have been used as fixed weights. Further details on weights used, &c., are to be found in Chapter XXX.—Miscellaneous.

## INDEXES OF QUANTUM(a) AND PRICE OF AGRICULTURAL PRODUCTION.

(Base : Average 3 years ended June, 1939 = 100.)

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.(b)
Quantum Produced—					
Wheat .. ..	120	102	119	82	59
Other Crops .. ..	134	131	144	144	140
Total, All Crops .. ..	129	120	134	120	109
Total per Head of Population	99	91	99	86	77
Price—					
Wheat .. ..	349	319	319	347	349
Other Crops .. ..	305	314	339	327	335
Total, All Crops .. ..	324	316	330	336	341

(a) Indexes of value at constant prices, i.e. quantities revalued at average unit values of the base years (1936-37 to 1938-39.) (b) Subject to revision.

## § 4. Wheat.

1. *Royal Commission on the Wheat Industry.*—A Royal Commission was appointed in January, 1934, to inquire into and report upon the economic condition of the industries of growing, handling and marketing wheat, and the manufacturing, distributing and selling of flour and bread. A searching inquiry was made by the Commission and the results of its investigations were submitted in a series of five reports. The first and second reports covered the wheat-growing industry, the third that of baking, the fourth the flour-milling industry, while the fifth, completed in February, 1936, dealt with the history of the Commission's investigations and traversed the principal recommendations submitted.

**2. Wheat Costs of Production Committee.**—A Wheat Costs of Production Committee was appointed by the Commonwealth Government in February, 1947, to inquire into and report upon:—(i) the reasonable costs of production of wheat per bushel in Australia's main wheat-growing districts, and (ii) whether basic items of costs could be established as an index to periodical variations in the costs of production of wheat. The Committee in its report to the Commonwealth Government in March, 1948, found that the cost of growing wheat in the Commonwealth at that time was 6s. a bushel at sidings and advised that basic items of cost could be established as an index to periodical variations in wheat production costs.

**3. Licensing of Areas Sown to Wheat, and Acreages Sown.**—Details of the operations of the Wheat Stabilization Board in licensing wheat growing during the seasons 1941–42 to 1948–49 will be found in Official Year Book No. 38, pp. 940, 941. The Board ceased to function on 31st December, 1948.

**4. Legislation relating to Wheat Industry.**—(i) *Stabilized Marketing.* A detailed survey of legislation relating to stabilization of the wheat industry, including controls exercised during the 1914–18 and 1939–45 Wars and legislation establishing the Wheat Stabilization Plan in 1948, was given in the Appendix to Official Year Book No. 37, pages 1295–99.

(ii) *The Australian Wheat Board.* The Australian Wheat Board was constituted in September, 1939, under National Security (Wheat Acquisition) Regulations to purchase, sell, or dispose of, wheat or wheat products, manage and control all matters connected with the handling, storage, protection, shipment, etc. of wheat acquired, and such other matters as were necessary to give effect to the regulations.

The Board was reconstituted, with similar powers, under the Commonwealth Wheat Stabilization Act 1948, to administer the stabilization plan. The new Board commenced to function on 18th December, 1948.

(iii) *Wheat Stabilization Plan.* (a) 1947–48 to 1952–53. Details of the Wheat Stabilization Plan which operated during the seasons 1947–48 to 1952–53 inclusive were published in Official Year Book No. 40, pages 841 and 842, and previous issues.

(b) 1953–54 to 1957–58. Details of the plan which operated during the seasons 1953–54 to 1957–58 inclusive were published in Official Year Book No. 44, page 861, and previous issues.

(c) 1958–59 to 1962–63. Following negotiations during 1958, a new wheat industry stabilization plan was enacted by the Commonwealth and the States towards the end of that year. The new plan follows the lines of the two earlier ones. Details of the plan are as follows:—

- (i) *Period of the Plan.* The plan will operate for five years. It will commence with the 1958–59 wheat crop and will end with the marketing of the 1962–63 crop.
- (ii) *Commonwealth Guarantee.* The Commonwealth will guarantee a return of 14s. 6d. a bushel to growers on up to 100 million bushels of wheat exported from the crop in the first year of the plan. The guaranteed return of 14s. 6d. is based on the findings of the recent survey of the economic structure of the wheat industry conducted by the Bureau of Agricultural Economics. It will be adjusted in each of the following years of the plan on up to 100 million bushels in accordance with the movements in costs based on a cost index established from the survey. The first two five-years' Wheat Stabilization Plans each guaranteed a similar quantity of 100 million bushels exported.
- (iii) *Australian Wheat Board.* The Australian Wheat Board will be maintained as the sole constituted authority for the marketing of wheat within Australia and for the marketing of wheat and flour for export from Australia for the period of the plan.
- (iv) *Stabilization Fund*—
  - (a) *Export Tax.* A tax will be collected on wheat exported which will be equivalent to the excess of the returns from export sales over the guaranteed return. However, the maximum rate of export tax will be 1s. 6d. a bushel.
  - (b) *Size of Fund.* The ceiling of the Stabilization Fund is established at £20 million; any excess beyond this figure will be returned to growers on the "first-in-first-out" principle.
  - (c) *Balance in Present Wheat Stabilization Fund.* The balance remaining in the Fund at the termination of the present plan will be carried forward to the new plan as the nucleus of a new stabilization fund.

- (d) *Use of the Stabilization Fund.* When the average export realizations fall below the guaranteed return, the deficiency will be made up first by drawing upon the stabilization fund in respect of up to 100 million bushels of wheat from each crop. When the fund is exhausted, the Commonwealth will meet its obligations under the guarantee.
- (v) *Home Consumption Price.* The home consumption base price for 1958–59, the first year of the plan, has been established as 14s. 6d. a bushel, bulk basis, f.o.r. ports plus 2d. a bushel loading to cover the cost of transporting wheat to Tasmania as outlined in (vi) below. There is provision in the plan for annual adjustments in the following years in accordance with the guaranteed price as outlined in (ii) above.
- (vi) *Freight on Wheat to Tasmania.* Provision is made for a loading on the price of all wheat sold for consumption in Australia to the extent necessary to cover the cost of transporting wheat from the mainland to Tasmania in each season of the plan.
- (vii) *Premium on Western Australian Wheat.* A premium will be paid from export realizations on wheat grown in Western Australia and exported from that State in recognition of the natural freight advantage enjoyed by Western Australia owing to its proximity to the principal overseas markets for wheat. The premium will be three pence a bushel.

By agreement between the parties concerned, the Australian Wheat Growers' Federation, the States and the Commonwealth, a poll of growers as to acceptance of the Plan was not considered necessary. The earlier plans had been approved by polls of growers.

(iv) *Wheat Industry Research.* In 1957, the Commonwealth Parliament passed legislation providing for a levy of a farthing a bushel on wheat handled by the Australian Wheat Board. This money, contributed by the growers, is to be spent by the Wheat Research Committees set up in the wheat growing States. These Committees, which consist of representatives of wheatgrowers, universities and State Departments of Agriculture, also received a total of £284,000 under the provisions of the Wheat Acquisition (Undistributed Moneys) Act 1958.

The Commonwealth Government has undertaken to supply additional funds for research (with a maximum of £1 for £1 against the growers' contribution) and has set up the Wheat Industry Research Council to make recommendations on the appropriate expenditure of the Commonwealth contribution.

The Council at its inaugural meeting in February, 1958, considered that possible avenues of research would include the breeding of better varieties, cereal chemistry, soil fertility, mechanization, the industry's cost structure and marketing problems.

The Council and the State Committees have allocated the expenditure of over £300,000 up to the end of June, 1959, including grants to the Commonwealth Scientific and Industrial Research Organization, State Departments of Agriculture, Universities and Agricultural Colleges.

**5. Marketing of Wheat.**—(i) *Wheat Acquired and Disposed of.* (a) *Wheat Acquired.* Particulars of wheat acquired by the Australian Wheat Board from the 1953–54 to 1957–58 harvests are shown in the following table:—

**AUSTRALIAN WHEAT BOARD : WHEAT ACQUIRED, 1953-54 TO 1957-58.**

(\*000 Bushels.)

Pool.	Harvest.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
17 .. ..	1953-54	57,844	52,219	9,102	27,711	36,161	161	183,198
18 and 18A ..	1954-55	32,385	46,431	14,605	28,636	30,628	65	152,750
19 .. ..	1955-56	51,789	39,079	14,098	26,107	49,649	39	180,761
20 .. ..	1956-57	24,014	32,931	5,837	29,154	28,171	22	120,129
21 .. ..	1957-58	4,617	29,547	5,245	12,535	29,306	74	81,324

(b) *Wheat Disposal.* Details relating to the disposal of wheat during the years ended 30th November, 1954 to 1958, are shown in the following table:—

**AUSTRALIAN WHEAT BOARD : DISPOSAL OF WHEAT, 1954 TO 1958.(a)**  
(\*000 Bushels.)

Particulars.	1954.	1955.	1956.	1957.	1958.
Sold for export as wheat .. ..	40,547	63,171	95,399	66,972	34,399
Sold for export as flour .. ..	26,871	(b) 34,024	(b) 34,950	(b) 32,334	(b) 16,868
Sold for local consumption as flour .. ..	35,860	38,012	39,832	41,162	39,213
Sold for other purposes .. ..	20,261	18,560	17,090	21,459	16,894

(a) Years ended 30th November.

(b) Includes wheat equivalent of manufactured wheat product exported.

(ii) *Finance.* The Wheat Acquisition Regulations empowered the Minister to arrange with the Commonwealth Bank for advances to the Board, the advances being guaranteed by the Commonwealth Government. The Wheat Industry Stabilization Act 1948 included similar provisions for advances to the reconstituted Board established under that Act and these provisions have been continued in the subsequent legislation.

**AUSTRALIAN WHEAT BOARD : FINANCIAL OPERATIONS, POOLS Nos. 17 to 21.**  
(£.)

Particulars.	No. 17 Pool.(a)	No. 18 Pool.(a)	No. 19 Pool.(a)	No. 20 Pool.(b)	No. 21 Pool.(b)
	(1953-54 Harvest.)	(1954-55 Harvest.)	(1955-56 Harvest.)	(1956-57 Harvest.)	(1957-58 Harvest.)
Paid to growers .. ..	99,892,850	83,328,200	98,223,364	68,797,590	48,615,764
Rail freight .. ..	12,737,501	10,010,374	12,455,382	7,725,397	4,900,985
Expenses .. ..	7,597,362	7,660,043	8,806,310	6,063,516	4,087,587
<i>Total Payments</i> .. ..	<i>120,227,713</i>	<i>100,998,617</i>	<i>119,485,056</i>	<i>82,586,503</i>	<i>57,604,336</i>
Value of sales delivered .. ..	c 129,388,146	d 100,810,092	e 118,475,473	f 84,384,005	g 57,529,697

(a) Complete. (b) Incomplete. (c) Includes £9,160,433 paid to Wheat Prices Stabilization Fund under Wheat Export Charge Act 1954. (d) Subject to addition of £188,525 withdrawn from Wheat Prices Stabilization Fund. (e) Subject to additional £1,009,583 withdrawn from Wheat Prices Stabilization Fund. (f) Includes £1,587,478 paid to Wheat Prices Stabilization Fund and £124,728 to Wheat Industry Research Fund. (g) Subject to additional £398,000 withdrawn from Wheat Prices Stabilization Fund and payment of £84,519 to Wheat Industry Research Fund.

NOTE.—Details of earlier pools will be found in previous issues of the Year Book.

(iii) *Advances to Growers.* Each year the size of the first advance to growers is announced by the Minister for Primary Industry before the commencement of the season. Additional payments are made as sufficient funds become available to the Board from sales realizations. Details of advances made to wheat growers in respect of the various pools are published in *Statistical Bulletin: The Wheat Industry, Australia*, last issued in April, 1959.

(iv) *Stabilization Fund.* Particulars of the most recent legislative provisions for this fund are given in para. 4 (iii) on page 877.

Amounts of £9,160,433 (equivalent to 1s. 5.4d. a bushel on all wheat exported) were paid into the Stabilization Fund from the Export Charge on exports from the 1953-54 harvest and £1,547,471 (equivalent to 6½d. a bushel) from the 1956-57 crop. There were withdrawals from the Fund in respect of both the 1954-55 and 1955-56 harvests—£188,525 (equivalent to 0.296d. a bushel on all wheat exported) and £1,035,833 (2.024d. a bushel) respectively—to raise export realizations in accordance with guarantee. The balance of the Fund plus interest from its investment, will first meet any payment needed for the 1957-58 wheat crop—the only Pool of the second Stabilization Plan not complete—and then the balance will form the nucleus of the Fund for the latest Plan.

6. *International Wheat Agreements.*—Details of the first and second International Wheat Agreements operative from 1st August, 1949, to 31st July, 1953, and from 1st August, 1953, to 31st July, 1956, respectively, were published in Official Year Book No. 42 (see pp. 840-1) and previous issues.

A new International Wheat Agreement covering a period of three years from 1st August, 1956, to 31st July, 1959, came into force on 1st August, 1956. The 1956 Agreement is identical in form with the 1949 and 1953 Agreements, although amendments have been made to many of the more important provisions.

The annual quota of 395 million bushels determined by the 1953 International Wheat Agreement was reduced in the new Agreement by almost a quarter to 303 million bushels.

As previously, 44 importing countries submitted figures for inclusion but many quotas were substantially less than those in the previous Agreement. The number of exporting countries was increased to six. Argentina and Sweden were the two additional exporting countries included and France was given a substantial quota instead of the nominal one it had in the 1953 Agreement.

As a result of the reduction in quantities submitted by importing countries and the participation of France, Argentina and Sweden, there has been a substantial reduction in the export quotas available for Australia, Canada and the United States. Australia's original quota was reduced from 45 million bushels under the 1953 Agreement to 30 million bushels.

In accordance with the terms of the Agreement, the original quotas allotted to exporting countries were reduced in conformity with the reduction in importers' quotas. The adjustment was made on the basis of ratifications as at 1st December, 1956. This pro rata adjustment gave Australia an export quota of 25.6 million bushels but this was increased to 29.3 million bushels when countries which had indicated their intention of doing so formally ratified the Agreement. The quota for 1957-58 and 1958-59 was set at 29.4 million bushels.

Particulars of guaranteed sales and purchases and transactions actually recorded during 1957-58 are shown in the following table.

**INTERNATIONAL WHEAT AGREEMENT: GUARANTEED SALES AND PURCHASES AND TRANSACTIONS RECORDED FOR 1957-58.(a)**  
(Million Bushels.)

Exporting Countries.			Importing Countries.		
Country.	Guaranteed Sales.(b)	Sales Recorded.	Country.	Guaranteed Purchases.(c)	Purchases Recorded.
United States of America ..	128.5	90.4	Germany .. ..	55.1	55.2
Canada .. ..	100.1	78.1	Japan .. ..	36.7	36.9
Australia .. ..	29.4	12.9	Netherlands .. ..	25.7	25.5
France .. ..	16.1	10.3	Cuba .. ..	8.1	8.0
Argentina .. ..	14.3	..	India .. ..	7.4	7.5
Sweden .. ..	6.2	2.7	Remaining Importing Countries .. ..	161.6	61.3
<b>Total .. ..</b>	<b>294.6</b>	<b>194.4</b>	<b>Total .. ..</b>	<b>294.6</b>	<b>194.4</b>

(a) Wheat and wheat flour as wheat. (b) Quantities which exporting countries must sell if required by importing countries to do so at the maximum price. (c) Quantities which importing countries must buy if required to do so at the relevant minimum price.

In March, 1959, an international conference decided on a further three year agreement to replace that due to expire on 31st July, 1959. Under the proposed new agreement, the member importing countries undertook to buy each year from the member exporting countries a stated percentage of their total commercial import requirements. The member exporting countries would compete to supply at prices within the agreed price range, which is 190 cents (Canadian currency)—about 17s. Australian—to 150 cents—about 13s. 6d.—a bushel. These prices are on the basis of Canada's No. 1 Manitoba Northern Wheat in bulk in store Fort William—Port Arthur.

The United Kingdom, the world's largest importer of wheat has decided to rejoin the agreement.

Under the new agreement, the International Wheat Council would be empowered to make an annual review of the world wheat situation, including the international implications of national policies in respect of wheat production, stocks, and marketing, and the disposal of wheat surpluses on non-commercial terms.

The proposed agreement does not retain the provision in the third agreement by which individual exporting countries had separate guaranteed quantities that they could call upon the member importing countries to buy at the minimum price.

There is provision for a right of appeal against excessive discounts at the minimum price on the basis of differences in quality between the basic wheat—Canada's No. 1 Manitoba Northern Wheat—and the wheat supplied by the other member exporting countries.

**7. Wheat Farms.—(i) Number.** Particulars of the number of farms growing 20 acres and upwards of wheat for grain during each of the years 1953-54 to 1957-58, compared with the average for the five years ended 1938-39, are shown in the following table. It should be noted that a farm worked on the share system or as a partnership is included as one holding only.

**NUMBER OF FARMS GROWING 20 ACRES AND UPWARDS OF WHEAT FOR GRAIN.**

State.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
New South Wales ..	15,657	14,865	13,784	14,086	10,197	12,111
Victoria ..	12,393	10,900	10,547	9,714	7,674	8,856
Queensland ..	2,403	3,918	4,570	4,186	3,131	3,665
South Australia ..	12,255	8,473	8,892	8,571	7,852	7,515
Western Australia ..	8,859	7,786	7,979	7,962	7,943	7,957
Tasmania ..	269	149	114	78	45	95
Australian Capital Territory ..	(a)	17	10	9	4	10
<b>Australia</b> ..	<b>51,836</b>	<b>46,108</b>	<b>45,896</b>	<b>44,606</b>	<b>36,846</b>	<b>40,209</b>

(a) Not available.

(ii) *Size Classifications of Wheat Holdings.*—A special series of tabulations relating to rural holdings in Australia was compiled for 1955-56 and published in full detail in a series of mimeographed bulletins, *Size Classification of Rural Holdings, 1955-56*. Condensed tables also appear in *Primary Industries, Part I.—Rural Industries, Bulletin No. 51*. The tables relating to wheat holdings show area under wheat for grain (classified by size), and the number of such holdings also under oats and barley and the number with sheep, beef cattle and pigs.

8. *Area, Production and Yield per Acre.*—(i) *Area.* Wheat is the principal crop grown in Australia, and its progress since 1860-61 has been almost continuous. Prominent features in its early development were the increase in population following the discovery of gold and the redistribution of labour after the surface gold had been won. The economic depression of 1893 interrupted its progress, but its subsequent recovery was assisted by the invention of mechanical appliances, the use of superphosphates as an aid to production, and the introduction of new and more suitable varieties for Australian conditions. The establishment of closer settlement schemes and the settling of returned soldiers and others on the land were additional factors in its expansion.

The area, production and yield per acre of wheat for grain in each State are shown below for the years 1953-54 to 1957-58 in comparison with the averages for the ten-year periods ended 1938-39 and 1956-57:—

**WHEAT FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE.**

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
<b>AREA ('000 ACRES).</b>								
Average, 1929-30 to 1938-39 ..	4,302	3,063	277	3,526	3,158	17	2	14,345
1953-54 ..	3,357	2,389	580	1,528	2,885	10	2	10,751
1954-55 ..	2,919	2,390	688	1,689	2,979	7	1	10,673
1955-56 ..	2,937	2,141	582	1,609	2,890	6	1	10,166
1956-57 ..	1,742	1,565	360	1,438	2,765	4	..	7,874
Average, 1947-48 to 1956-57 ..	3,283	2,497	562	1,760	2,932	6	2	11,042
1957-58 ..	2,257	1,835	461	1,331	2,957	6	1	8,848
<b>PRODUCTION ('000 BUSHEL). (a)</b>								
Average, 1929-30 to 1938-39 ..	55,935	38,416	4,118	34,700	35,812	374	43	169,398
1953-54 ..	63,681	53,698	10,180	30,409	39,700	263	29	197,960
1954-55 ..	37,718	48,484	16,478	31,463	34,300	159	15	168,617
1955-56 ..	57,149	41,083	14,922	28,891	53,250	129	19	195,443
1956-57 ..	28,490	35,282	7,061	31,432	32,100	89	1	134,435
Average, 1947-48 to 1956-57 ..	56,854	47,957	11,950	30,136	39,396	139	37	186,469
1957-58 ..	10,603	32,134	6,657	14,914	33,100	153	5	97,566

WHEAT FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE—*continued.*

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
YIELD PER ACRE (BUSHELS).(a)								
Average, 1929-30								
to 1938-39 ..	13.0	12.5	14.9	9.8	11.3	21.7	20.6	11.8
1953-54 ..	19.0	22.5	17.6	19.9	13.8	27.2	18.5	18.4
1954-55 ..	12.9	20.3	24.0	18.6	11.5	21.7	19.4	15.8
1955-56 ..	19.5	19.2	25.7	18.0	18.4	20.7	25.5	19.2
1956-57 ..	16.4	22.5	19.6	21.9	11.6	22.7	11.1	17.1
Average, 1947-48								
to 1956-57 ..	17.3	19.2	21.3	17.1	13.4	22.0	19.5	16.9
1957-58 ..	4.7	17.5	14.5	11.2	11.2	26.1	8.9	11.0

(a) 60 lb. per bushel.

A graph showing the expansion of the area sown to wheat for grain in Australia since 1900-01 appears on page 872 while a map showing the distribution of areas growing wheat for grain throughout Australia in 1954-55 appeared on page 833 of Official Year Book No. 43. Similar maps showing the distribution of wheat areas in 1924-25, 1938-39 and 1947-48 appeared respectively in Official Year Books No. 22, page 695, No. 34, page 451 and No. 39, pages 977-8.

(ii) *Production.* Apart from the variations in the area sown, the size of the wheat harvest in Australia is largely determined by the nature of the season, resulting in considerable year to year fluctuations in production.

The main wheat-producing States of Australia are New South Wales, Victoria, South Australia and Western Australia. Queensland production normally approaches local demands, but Tasmania imports wheat from the mainland to satisfy its needs, though it exports flour made from local wheat which is particularly suitable for biscuits. Normally the production of wheat greatly exceeds Australian requirements, and from half to two-thirds of the crop is exported.

Australia's wheat production in 1957-58 was 97.6 million bushels, representing an average yield of 11.0 bushels per acre. Production was the lowest since 1944-45, owing to severe drought conditions in the eastern States.

(iii) *Yield per Acre.* Short-term variations in yield per acre are due chiefly to seasonal influences. The best yields per acre for single seasons since 1901 were obtained in 1920-21, 16.1 bushels; in 1942-43, 16.8 bushels; in 1949-50, 17.8 bushels; in 1952-53, 19.1 bushels; in 1953-54, 18.4 bushels and in 1955-56, 19.2 bushels (the record).

(iv) *Decennial Averages, 1861-70 to 1949-58.* The following table shows the average area, production and yield per acre for decennial periods since 1861.

## WHEAT FOR GRAIN: AVERAGE AREA AND PRODUCTION, AUSTRALIA.

Period.	Area.			Production.		Yield per Acre.
	'000 Acres.			'000 Bushels.		Bushels.
1861-70 .. ..	831			10,622		12.8
1871-80 .. ..	1,646			17,711		10.8
1881-90 .. ..	3,258			26,992		8.3
1891-1900 .. ..	4,087			29,934		7.3
1901-10 .. ..	5,711			56,058		9.8
1911-20 .. ..	8,928			95,480		10.7
1921-30 .. ..	11,291			135,400		12.0
1931-40 .. ..	14,176			177,758		12.5
1941-50 .. ..	11,358			145,599		12.8
1949-58 .. ..	10,539			174,214		16.5

It should be noted that with improved farming methods, including the proper tillage of the soil, rotation of crops, the growing of suitable varieties and the application of fertilizers, the average yield per acre has shown a continued improvement in each decade since 1901.

9. *Varieties of Wheat Sown.*—(i) *General.* The breeding of wheat suitable to local conditions has long been established in Australia. Farrer (1845-1905) did invaluable work in pioneering this field and the results of his labour and the continued efforts of those who have followed him have proved of immense benefit to the industry. Their efforts have resulted in better average yields, a greater uniformity of sample with which have accrued certain marketing advantages, as well as an improvement in the quality of wheat grown. More than 1,000 different varieties of Australian wheats have been catalogued by the Commonwealth Scientific and Industrial Research Organization, but the number of principal varieties grown during each season is restricted to about 45.

(ii) *States*.—1957-58. The principal varieties of wheat sown and the percentage of each to the total area sown in the five main producing States during 1957-58 were as follows:—New South Wales, Gabo (26.2), Bencubbin (19.2), Glenwarie (15.3); Victoria, Insignia (49.4), Pinnacle (23.4), Quadrat (9.9); Queensland, Festival (29.7), Gabo (13.4), Spica (12.4), Charter (12.3); South Australia, Gabo (22.8), Insignia (18.1), Dirk (16.3); Western Australia, Gabo (29.3), Bungulla (16.8), Bencubbin (13.0). A detailed table of wheat varieties sown in these five States appears in the annual bulletin *Primary Industries—Part I.—Rural Industries*.

10. **F.A.Q. Standard of Wheat.**—Until the 1957-58 season, the Chambers of Commerce in each of the four main wheat-producing States have determined the "f.a.q." (fair average quality) standard for each season's crop. This standard is used as a basis for sales of each crop and it varies from year to year and from State to State.

Samples of wheat are obtained each year by the Chambers of Commerce from the different wheat districts and mixed to give a representative sample of the whole crop. From this representative sample the f.a.q. weight is determined by the use of the Schopper 1-litre scale chondrometer. Commencing with the 1958-59 season, the f.a.q. standard will be determined by State committees comprising representatives of the Australian Wheat Board, the silo authorities, the growers and State Departments of Agriculture. "F.a.q." is an Australian term, and the method of selling differs from that of other countries which sell according to sample, or (as in Canada) according to grades which are fixed and do not vary from year to year.

The f.a.q. weight of a bushel of wheat in each of the four main wheat-producing States for the 1958-59 season's crop was as follows:—New South Wales, North, 62 lb.; South and West, 61½ lb.; Victoria, 64 lb.; Queensland, 65½ lb.; South Australia, semi-hard, 63½ lb., soft, 63½ lb.; and Western Australia 63 lb.

11. **Price of Wheat.**—(i) *Home Consumption*. The price charged by the Australian Wheat Board for wheat sold to millers for gristing into flour for consumption in Australia and for wheat sold as stock feed was as follows:—Year ended 30th November, 1955, 14s. 1½d.; 1956, 13s. 5½d.; 1957, 13s. 9½d.; 1958, 14s. 4d.; 1959, 14s. 8d. These prices include an amount used to meet freight charges incurred on wheat shipped to Tasmania (1½d. from 1955 to 1957; 2d. in subsequent years). The figure quoted for 1958 does not apply to New South Wales and Queensland where, because of the necessity of meeting the extra cost of importing wheat from Canada and Western Australia, the prices, during the greater part of the year, were 18s. 4½d. and 16s. 9½d. respectively

(ii) *Export Wheat Prices—Australian Wheat Board's Basic Selling Price.*—The monthly average of the Wheat Board's basic export selling prices for f.a.q. bulk wheat f.o.b. basis was 13s. 5½d. for the season ended 31st July, 1957, both for wheat sold under the International Wheat Agreement and for "free" wheat sold on the open market. Actual selling prices have been lower than the basic prices in some cases, particularly where other exporting countries enjoy a geographical freight advantage.

The maximum and minimum prices fixed under the 1956-59 International Wheat Agreement are expressed in terms of "Canadian currency per bushel, at the parity of the Canadian dollar determined for the purposes of the International Monetary Fund for No. 1 Manitoba Northern wheat in bulk in store Fort William—Port Arthur." The maximum price was set at 200 cents a bushel and the minimum at 150 cents for f.a.q. wheat. Under the new agreement to operate after July, 1959 (see paragraph 6, page 879), the agreed price range is between 190 cents and 150 cents. Directly converted into Australian currency these limits are approximately 17s. and 13s. 6d. a bushel respectively.

Details of export wheat prices in previous years, including those received for wheat sold under the terms of the 1949-1953 International Wheat Agreement, are given in Official Year Book No. 40, pages 849-50, and Statistical Bulletin: *The Wheat Industry, Australia*, No. 95 of April, 1959, and in previous issues of these publications.

12. **Value of the Wheat Crop.**—The estimated gross value of the wheat crop in each State and in Australia during the seasons 1956-57 and 1957-58 and the value per acre are shown below.

WHEAT FOR GRAIN : VALUE OF CROP.(a)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
1956-57—								
Aggregate value £'000	19,185	24,041	4,914	22,423	22,027	57	..	92,647
Value per Acre £	11.0	15.4	13.7	15.6	8.0	14.6	..	11.8
1957-58(b)—								
Aggregate value £'000	6,590	22,069	4,648	10,502	22,958	101	3	66,871
Value per Acre £	2.9	12.0	10.1	7.9	7.8	16.8	2.7	7.6

(a) Gross value of total crop, including wheat used for seed and for stock feed on farms. (b) Subject to revision.

13. **Production and Disposal of Wheat in Australia.**—In the following table, details are given of the production of wheat and its disposal during each of the years ended 30th November, 1954 to 1958, in comparison with the average for the three years ended November, 1937 to 1939. The particulars respecting local consumption refer to sales actually executed by the Australian Wheat Board, whilst those respecting exports represent actual shipments. (For particulars of production and yield from 1900–01 see graph, p. 872.)

**WHEAT : PRODUCTION AND DISPOSAL, AUSTRALIA.**  
(Million Bushels.)

Particulars.	Average, Three Years ended 30th Nov. 1939.	Year ended 30th November—				
		1954.	1955.	1956.	1957.	1958.
Opening stocks (including flour as wheat)	10.2	37.7	94.9	95.0	84.2	41.5
Production .. .. .	164.7	198.0	168.6	195.4	134.5	97.6
Imports .. .. .	..	..	..	..	..	1.5
<i>Total Available Supplies</i> .. .. .	<i>174.9</i>	<i>235.7</i>	<i>263.5</i>	<i>290.4</i>	<i>218.7</i>	<i>140.6</i>
<b>Exports—</b>						
Wheat .. .. .	75.0	38.5	64.5	93.7	68.9	34.1
Flour as wheat(a) .. .. .	30.6	27.9	35.0	36.8	34.1	18.2
Breakfast foods and other products(b)	(c)	0.8	1.0	1.4	1.6	0.6
<b>Local Consumption—</b>						
Flour as wheat .. .. .	30.9	34.4	38.0	39.8	41.2	39.2
Stock feed .. .. .	9.3	17.6	16.5	15.3	19.6	15.0
Seed .. .. .	14.6	10.9	10.1	7.9	9.1	10.2
Breakfast foods and other products(b)	(c)	1.6	2.0	1.7	1.9	1.9
Balance retained on farm (excluding seed) .. .. .	(d)	3.9	5.8	6.7	5.3	6.1
Closing stocks (including flour as wheat)	14.5	94.9	95.0	84.2	41.5	16.5
<i>Total Disposals</i> .. .. .	<i>174.9</i>	<i>230.5</i>	<i>267.9</i>	<i>287.5</i>	<i>223.2</i>	<i>141.8</i>
<b>Excess (+) or Deficiency (–) of Disposals in respect of Available Supplies e</b> .. .. .	..	–5.2	+4.4	–2.9	+4.5	+1.2

(a) Includes wheatmeal from 1953, and sharps from July, 1954. (b) In terms of wheat.  
(c) Included with flour (local consumption). (d) Included with stock feed. (e) Includes allowance for unrecorded movements in stocks, gain or loss in out-turn, etc.

14. **Imports of Wheat.**—Due to drought conditions in 1957–58, wheat supplies, particularly in New South Wales, were insufficient for local requirements. As a result, 1,136,000 bushels were imported from Canada during March, April and May, 1958 and a further 349,000 bushels in July, 1958.

Wheat and flour have been imported in substantial quantities on only two previous occasions since 1900; in 1902–3 the wheat harvest was as low as 12,378,000 bushels, and wheat and flour representing 12,468,000 bushels of wheat were imported, whilst an equivalent of 7,279,000 bushels was imported in 1914–15 to supplement the yield of 25 million bushels produced in that season.

15. **Exports of Wheat and Flour.**—(NOTE: Statistics in this paragraph relate to years ended 30th June). (i) *Quantities.* The following table shows particulars of the exports of wheat and flour and total of both in terms of wheat for each of the years 1953–54 to 1957–58 compared with the average for the five years ended 1938–39. For the sake of convenience, flour has been expressed at its equivalent in wheat, 1 ton of flour being taken as equal to 46.3 bushels of grain. During the five years ended 1957–58, exports in terms of wheat averaged 91,666,000 bushels, compared with the average of 106,432,000 bushels for the five years ended 1938–39.

## WHEAT AND FLOUR : EXPORTS FROM AUSTRALIA.

Year.	Quantity.			Value. (£'000.)			
	Wheat.	Flour.		Total as Wheat.	Wheat.	Flour.	Total.
		As Flour. (a)	As Wheat. (b)				
	'000 bushels.	Tons. (2,000 lb.)	'000 bushels.	'000 bushels.			
Average, 1934-35 to 1938-39 .. ..	76,473	647,073	29,959	106,432	14,813	(c)5,058	19,871
1953-54 .. ..	36,058	785,520	36,370	72,428	30,957	30,602	61,559
1954-55 .. ..	63,133	683,520	31,647	94,780	45,222	21,184	66,406
1955-56 .. ..	71,041	684,229	31,680	102,721	46,456	20,273	66,729
1956-57 .. ..	91,107	766,655	35,496	126,603	60,058	22,234	82,292
1957-58 .. ..	39,575	479,985	22,223	61,798	28,494	15,059	43,553

(a) White flour, sharps and wheatmeal for baking. (b) One ton (2,000 lb.) of flour is taken to be equivalent to 46.3 bushels of wheat. (c) Excludes sharps and wheatmeal for baking.

(ii) *Destination.* (a) *Wheat.* The following table shows the exports of wheat to various countries for each of the five years ended 1957-58 and the average for the five years ended 1938-39.

## WHEAT : EXPORTS FROM AUSTRALIA.

('000 Bushels.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
United Kingdom .. ..	45,195	11,520	19,134	20,442	26,699	9,792
India .. ..	1,662	7,038	17,416	5,562	23,274	434
New Zealand .. ..	1,537	7,753	7,979	9,067	10,915	9,680
Pakistan .. ..	(a)	1,274	..	..	6,195	4,720
Other Commonwealth Countries	7,863	4,131	6,738	6,235	5,727	6,843
Germany, Federal Republic of	(b) 235	1,888	5,084	8,189	7,950	..
Japan .. ..	6,472	227	2,034	11,261	3,427	6,762
Other Foreign Countries .. ..	13,509	2,227	4,748	10,285	6,920	1,344
Total .. ..	76,473	36,058	63,133	71,041	91,107	39,575

(a) Included with India.

(b) Pre-war Germany.

(b) *Flour.* The following table shows the exports of flour to various countries for each of the five years ended 1957-58, and the average for the five years ended 1938-39. The figures relate to exports of white flour, sharps and wheatmeal for baking.

## FLOUR : EXPORTS FROM AUSTRALIA.

(Tons of 2,000 lb.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
United Kingdom .. ..	142,912	65,659	80,832	67,136	80,735	43,156
Ceylon .. ..	16,915	222,512	112,484	115,899	181,137	51,613
Malaya, Federation of .. ..	63,309	72,376	88,546	81,740	71,963	70,299
Mauritius .. ..	10,992	32,192	20,102	12,659	27,660	17,411
Singapore .. ..	(b)	64,934	77,956	54,707	47,243	37,590
Other Commonwealth Countries	89,168	94,403	90,797	86,238	102,189	94,785
Indonesia .. ..	c 83,760	133,406	95,510	178,098	115,660	62,897
Sudan .. ..	12,181	5,777	20,580	14,415	28,762	11,258
Other Foreign Countries .. ..	227,836	94,261	96,713	73,337	111,306	90,976
Total .. ..	647,073	785,520	683,520	684,229	766,655	479,985

(a) Excludes sharps and wheatmeal for baking.  
(c) Netherlands East Indies.

(b) Included with Federation of Malaya

16. **Stocks of Wheat and Flour.**—Stocks of wheat and flour in terms of wheat held by each State at 30th November for the years 1939 and 1954 to 1958 are shown in the following table. These data relate to stocks held at mills, sidings, ports and depots as recorded by the Australian Wheat Board.

**WHEAT (INCLUDING FLOUR IN TERMS OF WHEAT) : STOCKS AT  
30th NOVEMBER.(a)  
(\*000 Bushels.)**

30th November—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1939 .. ..	6,674	4,702	549	6,134	2,513	241	20,813
1954 .. ..	26,458	26,937	2,487	15,413	23,499	125	94,919
1955 .. ..	17,483	28,434	4,049	18,470	26,278	256	94,970
1956 .. ..	21,365	22,821	1,973	15,223	22,534	265	84,181
1957 .. ..	8,982	13,304	203	13,732	5,056	215	41,492
1958 .. ..	4,420	6,172	116	3,262	2,260	222	16,452

(a) One ton of flour is treated as equivalent to 46.3 bushels of wheat.

17. **Bulk Handling and Storage of Wheat in Australia.**—(i) *Description and Development of the Bulk Handling System.* A detailed description of the bulk handling system including its advantages and disadvantages compared with other methods of handling appeared on pages 954–8 of Official Year Book No. 39.

New South Wales, Victoria and Western Australia have operated bulk handling systems for a number of years, but until recently no efforts were made to introduce such systems in the other States.

Late in 1953, it became clear that Australia could not clear its stocks of wheat as quickly as in past years and in April, 1954, the Commonwealth Government arranged to finance the construction of additional storage in New South Wales, Victoria and South Australia (Western Australia and Queensland were later included in the scheme). The Australian Wheat Board was authorized to control the expenditure of the money provided, amounting to £3½ million.

(ii) *Bulk Handling and Storage in the States.* Particulars of the operation of the bulk handling and storage systems and projected extensions in the States concerned are set out below:—

(a) *New South Wales.* Bulk handling facilities are operated by the Grain Elevators Board of New South Wales. The capacity of storages in the country for the 1958–59 season totalled 57,558,000 bushels and comprised 180 elevators (25,228,000 bushels), 4 sub-terminals (16,500,000 bushels), 71 bulkheads (7,130,000 bushels) and 12 bulk depots (8,700,000 bushels). In addition, port terminal facilities provided storage for 4,200,000 bushels at Newcastle and 7,500,000 bushels at Sydney, making a total capacity of 69,258,000 bushels for the State.

The Grain Elevators Board has advanced its plans for major works, i.e., for supplementary bins to the existing small capacity silos, as well as for new installations to replace temporary bulkheads in certain areas.

(b) *Victoria.* The Victorian Grain Elevators Board operates 184 elevators with a storage capacity of 26,697,000 bushels and a terminal elevator at Geelong with a capacity of 4,100,000 bushels. Storages for 18,000,000 bushels, adjacent to the permanent terminal, have been constructed at Geelong.

Temporary measures for extending bulk handling facilities have been adopted and sub-terminals constructed or acquired at Dunolly, Murtoa and Warracknabeal with a capacity of 22,000,000 bushels. Temporary bulkheads have also been used and in the 1958–59 season there were 32 available for use with a total capacity of 2,684,000 bushels.

In 1958–59, 98.4 per cent. of the total crop was received in elevators, compared with 98.5 per cent. in 1957–58 and 28.1 per cent. in 1939–40.

(c) *Queensland.*—Bulk storages in this State are controlled and operated by the State Wheat Board. The capacity in the country for the 1958–59 season totalled about 3,000,000 bushels.

Expansion of bulk facilities is proceeding. Several bagged wheat sheds are being converted into bulkhead type storages and a further 1,000,000 bushels capacity will be available in temporary steel mesh bins being erected.

A new terminal bulk storage is being erected at Pinkenba with a capacity of 1,300,000 bushels and is expected to be completed in July 1959.

(d) *South Australia.* Since the formation of the South Australian Co-operative Bulk Handling Ltd. in 1955, steady progress has been maintained in the expansion of the system.

The present capacity of bulk storages is 1,000,000 bushels at Ardrossan; 1,500,000 at Wallaroo; 1,250,000 at Port Lincoln and 6,460,000 in the country; a combined total of 10,210,000.

For the 1958-59 season, wheat was received in bulk at 15 installations in the country in addition to the terminals at Ardrossan, Wallaroo and Port Lincoln.

For the 1959-60 season, the South Australian Co-operative Bulk Handling Ltd. will have an initial capacity to handle 12,950,000 bushels of wheat in bulk.

(e) *Western Australia.* The bulk handling system is operated by Co-operative Bulk Handling Ltd., which is a company controlled by growers. In 1958-59, there were 280 sidings equipped with bulk handling facilities and 53,300,000 bushels, which comprised the whole of the marketable harvest, were received.

The system of storage at country stations in Western Australia comprises fixed installations of galvanized iron bins and iron and timber horizontal bulkheads. In addition, a type of temporary roofed bulkhead consisting of timber and iron is used. This latter type of storage can be transferred to suit operational requirements, and therefore lends flexibility to the system. Terminal installations comprise concrete silos and timber and iron horizontal bulkheads with the exception that one port is equipped with iron silos instead of concrete. Plans are in hand to increase the number of vertical concrete cell type storages at the main ports.

(f) *Tasmania.* In order to meet the change to bulk handling of wheat in the mainland exporting States, the Tasmanian Government has constructed grain elevators at Hobart and Launceston each with a capacity of 300,000 bushels for storage of bulk wheat shipments from the mainland. In addition an elevator is being constructed at Devonport with a capacity of 300,000 bushels.

18. **World Area and Production of Wheat.**—The details in the following table of the world area and production of wheat by principal countries and by continents have been compiled from official sources so far as they are available, but more particularly from the records published by the Food and Agriculture Organization of the United Nations, and the Foreign Agricultural Service of the United States Department of Agriculture. The harvests shown for countries in the Northern Hemisphere are those reaped during the period March to October whilst those for the Southern Hemisphere cover the period November to February following.

**WHEAT : AREA, PRODUCTION AND YIELD PER ACRE IN VARIOUS COUNTRIES.**

Continent and Country.	Area(a)			Production.			Yield per Acre.		
	Average 1935-39.	1956.	1957.(b)	Average 1935-39.	1956.	1957.(b)	Average 1935-39.	1956.	1957.(b)
	'000 acres.	'000 acres.	'000 acres.	'000 bushels.	'000 bushels.	'000 bushels.	bus.	bus.	bus.
<i>North America—</i>									
<i>Canada</i> ..	25,595	22,781	21,031	312,399	573,062	370,508	12.2	25.2	17.6
<i>United States</i> ..	57,293	49,784	43,664	758,629	1,004,272	947,102	13.2	20.2	21.7
<i>Total(c)</i> ..	84,170	74,970	67,140	1,086,000	1,624,000	1,364,000	12.9	21.7	20.3

See next page for footnotes.

**WHEAT : AREA, PRODUCTION AND YIELD PER ACRE IN VARIOUS COUNTRIES—continued.**

Continent and Country.	Area.(a)			Production.			Yield per Acre.		
	Average 1935-39.	1956.	1957.(b)	Average 1935-39.	1956.	1957.(b)	Average 1935-39.	1956.	1957.(b)
	'000 acres.	'000 acres.	'000 acres.	'000 bushels.	'000 bushels.	'000 bushels.	bus.	bus.	bus.
<i>Europe—</i>									
France .. .. .	12,560	7,000	11,534	286,505	225,000	407,000	22.8	32.1	35.3
Italy .. .. .	12,577	12,350	12,375	278,366	318,930	310,000	22.1	25.8	25.1
Spain .. .. .	(d)11,253	10,638	(e)	(d)157,986	155,000	180,000	14.0	14.6	(e)
<i>Total(c)</i> .. .. .	<i>74,850</i>	<i>67,580</i>	<i>72,980</i>	<i>1,600,000</i>	<i>1,585,000</i>	<i>1,945,000</i>	<i>21.4</i>	<i>23.5</i>	<i>26.7</i>
<i>U.S.S.R</i> .. .. .	<i>104,000</i>	<i>153,000</i>	<i>170,000</i>	<i>1,240,000</i>	<i>2,000,000</i>	<i>1,800,000</i>	<i>11.9</i>	<i>13.1</i>	<i>10.6</i>
<i>Africa—Total(c)</i> .. .. .	<i>13,850</i>	<i>17,400</i>	<i>17,240</i>	<i>143,000</i>	<i>215,000</i>	<i>185,000</i>	<i>10.3</i>	<i>12.4</i>	<i>10.7</i>
<i>Asia—</i>									
China .. .. .	(f)49,000	(e)	(e)	(f)750,000	(e)	(e)	f 15.3	(e)	(e)
India .. .. .	(f)25,460	30,386	33,580	262,100	319,910	347,700	10.3	10.5	10.4
Pakistan .. .. .	(f) 9,305	11,298	11,807	117,000	123,760	142,000	12.6	11.0	12.0
Turkey .. .. .	8,973	18,125	17,878	135,690	215,000	250,000	15.1	11.9	14.0
<i>Total(c)</i> .. .. .	<i>114,190</i>	<i>146,890</i>	<i>146,630</i>	<i>1,558,000</i>	<i>1,860,000</i>	<i>1,915,000</i>	<i>13.6</i>	<i>12.7</i>	<i>13.1</i>
<i>South America—</i>									
Argentina .. .. .	15,834	13,324	10,840	221,769	261,980	213,500	14.0	19.7	19.7
<i>Total(c)</i> .. .. .	<i>20,490</i>	<i>20,840</i>	<i>18,670</i>	<i>281,000</i>	<i>368,000</i>	<i>323,000</i>	<i>13.7</i>	<i>17.7</i>	<i>17.2</i>
<i>Oceania—</i>									
Australia .. .. .	13,128	7,874	8,848	169,744	134,455	97,566	12.9	17.1	11.0
<i>Total(c)</i> .. .. .	<i>13,349</i>	<i>7,940</i>	<i>8,915</i>	<i>176,873</i>	<i>137,405</i>	<i>100,566</i>	<i>13.2</i>	<i>17.3</i>	<i>11.3</i>
<b>World Total(c)</b> .. .. .	<b>424,900</b>	<b>488,620</b>	<b>501,580</b>	<b>6,085,000</b>	<b>7,790,000</b>	<b>7,630,000</b>	<b>14.3</b>	<b>15.9</b>	<b>15.3</b>

(a) Figures refer to harvested areas as far as possible. (b) Preliminary. (c) Totals (estimates) include allowances for any missing data for countries shown and for other producing countries not shown. (d) 1935 only. (e) Not available. See footnote (c). (f) Average of less than five years.

**19. Exports—Principal Countries.**—The following table shows the quantities of wheat exported from the chief exporting countries for the period 1934-38 and the years 1956 and 1957 based on statistics recently published by the Food and Agriculture Organization of the United Nations.

While Australia's production of wheat averages less than 3 per cent. of the world's total, its exports account for a much higher proportion of the total quantities shipped. During the five years 1934-38, Australia's share of world wheat exports was 16 per cent., but in 1957 the proportion had fallen to a little more than 7 per cent.

## WHEAT(a) : EXPORTS, PRINCIPAL COUNTRIES.

Exporting Country.	Average, 1934-38.		1956.		1957.	
	Quantity.	Proportion of World Total.	Quantity.	Proportion of World Total.	Quantity.	Proportion of World Total.
	million bushels.	%	million bushels.	%	million bushels.	%
Canada .. .. .	175.3	27.6	341.1	28.5	266.8	20.7
Argentina .. .. .	122.7	19.3	94.4	7.9	98.5	7.6
Australia .. .. .	102.4	16.1	135.8	11.3	94.5	7.3
United States of America .. .. .	46.3	7.3	470.9	39.3	483.2	37.4
U.S.S.R. (Russia) .. .. .	26.6	4.2	(b)	(b)	(b)	(b)
France .. .. .	18.3	2.9	52.6	4.4	50.6	3.9
All other .. .. .	144.0	22.6	102.3	8.6	297.7	23.1
<i>Total</i> .. .. .	<i>635.6</i>	<i>100.0</i>	<i>1,197.1</i>	<i>100.0</i>	<i>1,291.3</i>	<i>100.0</i>
World Production (mil. bus.) ..	(c) 6,085		7,790		7,630	
Proportion of Australia's Production to World Production	%		%		%	
	2.8		1.7		1.3	

(a) Includes flour expressed in terms of wheat. 1935-39.

(b) Included in "All Other."

(c) Average

20. Imports—Principal Countries.—The principal importers of wheat, together with quantities imported, for the periods indicated, are shown in the following table:—

## WHEAT(a) : IMPORTS, PRINCIPAL COUNTRIES.

Importing Country.	Average, 1934-38.		1956.		1957.	
	Quantity.	Proportion of World Total.	Quantity.	Proportion of World Total.	Quantity.	Proportion of World Total.
	million bushels.	%	million bushels.	%	million bushels.	%
United Kingdom .. .. .	208.7	33.8	197.5	17.2	186.7	14.7
Brazil .. .. .	36.4	5.9	55.0	4.8	54.2	4.3
Italy .. .. .	26.0	4.2	23.7	2.1	19.6	1.5
Germany, Federal Republic of ..	(b) 25.6	(b) 4.1	109.1	9.5	106.6	8.4
Netherlands .. .. .	22.6	3.7	34.4	3.0	36.7	2.9
Japan .. .. .	11.6	1.9	86.0	7.5	85.2	6.7
India and Pakistan .. .. .	1.8	0.3	56.8	4.9	131.3	10.3
Egypt .. .. .	0.6	0.1	25.1	2.2	26.1	2.1
All other .. .. .	284.0	46.0	559.1	48.8	623.2	49.1
<i>Total</i> .. .. .	<i>617.3</i>	<i>100.0</i>	<i>1,146.7</i>	<i>100.0</i>	<i>1,269.6</i>	<i>100.0</i>

(a) Includes flour expressed in terms of wheat.

(b) Pre-war Germany.

## § 5. Oats.

1. **Area, Production and Yield per Acre.**—Oats is usually next in importance to wheat amongst the grain crops cultivated in Australia, but while wheat grown for grain in 1957–58 accounted for 41.2 per cent., oats grown for grain represented only 13.8 per cent. of the area of all crops. The area, production and yield per acre of oats for the years 1953–54 to 1957–58 and the averages for the ten-year periods ended 1938–39 and 1956–57 are shown in the following table:—

OATS FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
AREA ('000 ACRES).								
Average, 1929–30								
to 1938–39 ..	229	478	5	282	369	30	..	1,393
1953–54 ..	507	584	13	280	733	20	..	2,137
1954–55 ..	657	644	36	340	874	23	..	2,574
1955–56 ..	902	871	36	425	1,091	29	..	3,354
1956–57 ..	420	613	28	427	1,051	17	..	2,556
Average, 1947–48								
to 1956–57 ..	551	634	27	336	744	21	..	2,313
1957–58 ..	716	622	19	427	1,154	21	..	2,959
PRODUCTION ('000 BUSHELS).(a)								
Average, 1929–30								
to 1938–39 ..	3,578	5,750	68	2,233	3,973	831	4	16,437
1953–54 ..	8,533	9,852	199	4,321	9,590	461	5	32,961
1954–55 ..	7,667	10,021	597	4,508	9,585	452	4	32,834
1955–56 ..	16,537	14,858	743	7,280	16,516	548	5	56,487
1956–57 ..	6,274	9,555	553	8,318	10,441	253	2	35,396
Average, 1947–48								
to 1956–57 ..	9,120	10,866	511	5,153	9,185	422	5	35,262
1957–58 ..	3,944	9,528	256	3,423	13,793	482	(b)	31,426
YIELD PER ACRE (BUSHELS).(a)								
Average, 1929–30								
to 1938–39 ..	15.7	12.0	12.8	7.9	10.8	28.2	22.4	11.8
1953–54 ..	16.8	16.9	14.8	15.4	13.1	22.9	18.6	15.4
1954–55 ..	11.7	15.3	16.4	13.3	11.0	20.0	20.4	12.8
1955–56 ..	18.3	17.1	20.8	17.1	15.1	19.1	17.1	16.8
1956–57 ..	14.9	15.6	20.1	19.5	9.9	15.3	12.5	13.8
Average, 1947–48								
to 1956–57 ..	16.6	17.1	18.9	15.3	12.3	20.1	15.2	15.2
1957–58 ..	5.5	15.3	13.4	8.0	12.0	23.3	7.4	10.6

(a) 40 lb. per bushel.

(b) Less than 500 bushels.

A graph showing the production of oats appears on page 873.

Due to the extremely wet conditions early in the season, which affected most crops in the Eastern States during 1956–57, the area and production of oats were markedly smaller than in 1955–56, particularly in New South Wales. In 1957–58, the drought conditions already referred to had a similar, and even more severe, effect on the crop in New South Wales and South Australia.

The production of oats for grain in Australia during 1955–56 was a record (56,487,000 bushels). Pre-war the average was approximately 16,000,000 bushels whilst the crop in 1957–58 was 31,425,591 bushels.

During the five seasons ending 1956–57, an average of 7.2 million bushels were exported; 1.9 million bushels were used in factories for oatmeal; and 7.3 million bushels were used for seed purposes; leaving a balance of 23.9 million bushels for stock feed (principally unprocessed) and carry-over.

The largest yield per acre recorded for Australia in the ten years ended 1956–57 was that of the season 1947–48, amounting to 19.3 bushels per acre, this being the highest yield since 1920–21. The yield per acre recorded in the abnormally dry season 1944–45, namely 4.4 bushels, was the lowest ever recorded for Australia.

2. **Price of Oats.**—The average wholesale price in the Melbourne market for oats of good milling quality in 1957–58 was 10s. 11½d. per bushel. This represents an increase of approximately 50 per cent. on the price in 1956–57 (7s. 4d.). The price in 1938–39 was 3s. 5½d.

3. Value of Oat Crop.—The estimated gross value of the oat crop in each State for the 1956-57 and 1957-58 seasons and the value per acre were as follows:—

OATS : VALUE OF CROP.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
1956-57—								
Aggregate value	£'000 2,484	3,315	304	2,326	3,695	114	1	12,239
Value per acre	£ 5.9	5.4	11.0	5.4	3.5	6.9	6.9	4.8
1957-58(a)—								
Aggregate value	£'000 2,416	5,313	152	1,685	6,137	248	..	15,951
Value per acre	£ 3.4	8.5	8.0	3.9	5.3	11.8	5.4	5.4

(a) Subject to revision.

4. Exports.—The production of oats in Australia is sufficient to admit of a regular export trade. The quantities and values of oats exported from Australia during the years 1953-54 to 1957-58 compared with the average for the years 1934-35 to 1938-39 are shown hereunder:—

OATS : EXPORTS, AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Quantity .. '000 bus.	286	3,275	2,872	9,608	8,165	2,296
Value.. .. £'000	36	1,219	1,376	3,578	2,972	1,064

In 1957-58, the principal countries of destination of the exports were the Federal Republic of Germany, the United Kingdom, the Netherlands and the Federation of Malaya. Imports of oats are not recorded separately.

5. Oatmeal, etc.—The production of oatmeal amounted in 1957-58 to 14,440 tons equivalent to about 1,617,000 bushels of oats, or about 5.1 per cent. of the total production.

6. World Production.—The world's production of oats for the year 1958, according to preliminary details released by the United States Department of Agriculture, amounted to 4,160 million bushels, harvested from 113.7 million acres, representing an average yield of 36.6 bushels per acre. This compared with the estimated production in the previous year of 3,995 million bushels from an area of 117.8 million acres giving an average yield of 33.9 bushels per acre. The world's average production for the years 1934 to 1938 amounted to 3,588 million bushels from 143 million acres giving an average yield of 25.09 bushels per acre.

§ 6. Maize.

1. States Growing Maize.—Maize is grown for grain chiefly in Queensland and New South Wales, the area so cropped in these States during the 1957-58 season being 179,758 acres, or 98 per cent. of the total for Australia. In all States except South Australia, the crop is grown to some extent for green fodder, particularly in connexion with the dairying industry.

2. Area, Production and Yield per Acre.—Although maize for grain is grown extensively in other countries, the area sown to maize for grain in Australia has averaged only 180,894 acres during the ten years ended 1956-57. The area in 1957-58 was 184,062 acres, a slight increase over the previous year, but still considerably less than the comparatively larger areas of 414,914 and 400,544 acres sown in 1910-11 and 1927-28 respectively.

There has been a considerable increase in recent years in the growing of maize from hybrid strains of seed. Varieties have been developed which are capable of producing yields per acre considerably in excess of the older open pollinated types. The expansion in areas sown to hybrid maize has led to a parallel development in the specialized industry of growing hybrid strains for seed.

The area, production and yield per acre of maize for grain in each State for the years 1953-54 to 1957-58 and the averages for the ten-year periods ended 1938-39 and 1956-57 are given in the following table. Separate details for hybrid and other varieties are shown for New South Wales, Victoria and Queensland for 1957-58.

## MAIZE FOR GRAIN : AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
AREA (ACRES).								
Average, 1929-30 to 1938-39 ..	114,881	18,413	161,380	12	15	..	7	294,708
1953-54 ..	58,556	5,613	114,735	..	21	64	..	178,989
1954-55 ..	50,617	4,379	114,673	2	8	..	..	169,687
1955-56 ..	55,678	3,535	108,146	6	6	65	2	167,441
1956-57 ..	53,225	2,727	125,606	(c)	10	2	..	181,570
Average, 1947-48 to 1956-57 ..	62,329	4,920	113,589	(c)	35	20	1	180,894
1957-58—								
Hybrid ..	38,655	3,459	62,066	} (c)	20	..	6	184,062
Other ..	18,858	819	60,179					
PRODUCTION ('000 BUSHEL). (b)								
Average, 1929-30 to 1938-39 ..	3,072	631	3,525	..	..	..	..	7,228
1953-54 ..	1,737	298	3,042	..	..	2	..	5,079
1954-55 ..	1,767	229	3,080	..	..	..	..	5,076
1955-56 ..	1,868	176	2,710	..	..	1	..	4,755
1956-57 ..	1,945	81	3,468	(c)	..	..	..	5,494
Average, 1947-48 to 1956-57 ..	1,959	212	2,975	(c)	..	1	..	5,147
1957-58—								
Hybrid ..	1,574	208	1,736	} (c)	..	..	..	5,639
Other ..	663	33	1,425					
YIELD PER ACRE (BUSHEL). (b)								
Average, 1929-30 to 1938-39 ..	26.7	34.3	21.8	29.8	10.0	..	8.5	24.5
1953-54 ..	29.7	53.1	26.5	..	12.9	29.6	..	28.4
1954-55 ..	34.9	52.3	26.9	15.0	9.8	21.6	..	29.9
1955-56 ..	33.5	49.7	25.1	12.5	15.0	19.4	80.0	28.4
1956-57 ..	36.6	29.6	27.6	(c)	12.0	30.0	..	30.3
Average, 1947-48 to 1956-57 ..	31.4	43.1	26.2	(c)	11.5	22.8	23.7	28.5
1957-58—								
Hybrid ..	40.7	60.3	28.0	} (c)	14.9	..	..	30.6
Other ..	35.1	40.7	23.7					

(a) Includes 3 acres in the Northern Territory.

(b) 56 lb. per bushel.

(c) Not available for publication.

The average yield for Australia for the ten-year period ended 1956-57 was 28.5 bushels per acre. Among principal producing countries during 1957, the United States of America averaged 46.8 bushels per acre and Italy 40.9 bushels.

3. Price of Maize.—The average wholesale price of maize in the Melbourne market in 1957-58 was 21s. 2½d. a bushel compared with 17s. 0½d. in 1956-57. In 1938-39, the comparable price for maize of similar quality was 5s. 2½d.

4. Value of Crop.—The estimated gross value of the crop in each State for the 1956-57 and 1957-58 seasons and the value per acre were as follows:—

## MAIZE FOR GRAIN : VALUE OF CROP.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1956-57—							
Aggregate value .. £'000.	1,508	67	2,157	..	..	..	3,732
Value per acre .. £	28.3	24.6	17.2	..	..	..	20.6
1957-58(a)—							
Aggregate value .. £'000	2,321	159	2,514	..	1	..	4,995
Value per acre .. £	40.4	37.2	20.6	..	29.7	..	27.1

(a) Subject to revision.

5. Exports of Maize and Maize Products.—Details of exports of maize for the five years ended 1957-58 compared with the average of the five years ended 1938-39 are shown below.

## MAIZE : EXPORTS, AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Quantity .. '000 bus.	57	504	458	185	32	48
Value .. £'000	9	353	301	119	26	30

Imports of Maize are not recorded separately.

Exports of cornflour, which prior to the 1939-45 War were very small, increased considerably during the war years, the principal country of destination being New Zealand. In 1957-58, 1,499,600 lb., valued at £44,699, were exported, compared with an annual average of only 37,000 lb. during the five years ended 1938-39. It should be noted that these figures include some quantities of "cornflour" made from wheat. Imports of cornflour into Australia are not recorded separately.

6. **World Production.**—According to preliminary details released by the United States Department of Agriculture, world production of maize in the year 1957 amounted to 6,470 million bushels, harvested from 230 million acres, giving an average yield per acre of 28.1 bushels. This compared with production in the previous year of 6,490 million bushels from 240 million acres, yielding an average per acre of 27.1 bushels. Production over the years 1934 to 1938 averaged 4,525 million bushels from 218 million acres, giving an average yield per acre of 21.0 bushels.

The United States of America is the most important maize-producing country in the world and during the three years ended 1957 the area sown to maize in that country averaged 76 million acres or 32 per cent. of the world total. During the same period, production averaged 3,359 million bushels or about 52 per cent. of the world total. These figures are not strictly comparable with those for other countries included in the above-mentioned world totals, as the area and an estimate of grain equivalent of maize used as green fodder are included. In recent years, maize grain actually harvested in the United States has amounted to about 90 per cent. of the total crop.

A graph showing the production of maize in Australia appears on page 873.

§ 7. Barley.

1. **Area, Production and Yield per Acre.**—The area sown to barley for grain expanded considerably during the ten years preceding the 1939-45 War—from 383,000 acres in 1930-31 to 836 000 acres in 1939-40. This increase was followed by a decline to 443,000 acres in 1943-44 but the area sown has increased in succeeding years and in 1957-58 reached the record level of 2,121,000 acres. Victoria was originally the principal barley-growing State but since 1913-14 its place has been taken by South Australia which accounted for 57 per cent. of the Australian acreage in 1957-58. There has been a substantial increase in the acreage sown in most States in recent years particularly in Western Australia and Queensland. Small areas of barley are sown for hay, and larger quantities are sown for green forage but these are not included in this section. The production of barley for grain in Australia in 1957-58 was 30,466,000 bushels. The highest recorded production occurred in 1956-57 when 49,279,000 bushels were produced. The area, production and yield per acre of barley for grain in the several States for the years 1953-54 to 1957-58 and the averages for the ten-year periods ended 1938-39 and 1956-57 are shown in the following table:—

BARLEY FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
AREA ('000 ACRES).								
Average, 1929-30 to 1938-39 ..	11	107	8	331	31	7	..	495
1953-54 ..	32	375	56	1,122	209	9	..	1,803
1954-55 ..	37	280	87	1,020	260	7	..	1,691
1955-56 ..	54	309	146	1,042	337	6	..	1,894
1956-57 ..	44	345	131	1,222	344	7	..	2,093
Average, 1947-48 to 1956-57 ..	26	254	61	889	157	7	..	1,394
1957-58	46	334	152	1,156	63	7	..	1,758
Malting (2-Row)	23	18	21	56	244	1	..	363
Other (6-Row)	69	352	173	1,212	307	8	..	2,121
Total ..	69	352	173	1,212	307	8	..	2,121

BARLEY FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE—*continued.*

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
PRODUCTION ('000 BUSHELLS).(a)								
Average, 1929-30 to 1938-39 ..	173	1,976	132	5,714	371	186	1	8,553
1953-54 ..	680	7,932	1,139	28,492	2,733	296	..	41,272
1954-55 ..	500	4,946	2,573	18,376	2,805	200	..	29,400
1955-56 ..	1,120	6,877	4,216	24,598	4,653	191	..	41,655
1956-57 ..	781	7,549	2,960	34,003	3,751	235	..	49,279
Average, 1947-48 to 1956-57 ..	483	5,217	1,557	20,512	1,999	193	..	29,961
1957-58—								
Malting (2-Row)	441	5,201	2,662	17,091	758	251	..	26,404
Other (6-Row)	244	246	294	461	2,798	19	..	4,062
Total ..	685	5,447	2,956	17,552	3,556	270	..	30,466
YIELD PER ACRE (BUSHELLS).(a)								
Average, 1929-30 to 1938-39 ..	16.6	18.4	16.7	17.3	11.9	25.2	18.9	17.3
1953-54 ..	21.4	21.2	20.3	25.4	13.1	31.4	..	22.9
1954-55 ..	13.6	17.6	29.5	18.0	10.8	27.5	..	17.4
1955-56 ..	20.7	22.2	29.0	23.6	13.8	30.2	15.0	22.0
1956-57 ..	17.7	21.9	22.5	27.8	10.9	33.2	..	23.5
Average, 1947-48 to 1956-57 ..	18.6	20.5	25.3	23.1	12.8	29.6	..	21.5
1957-58—								
Malting (2-Row)	9.7	15.6	17.5	14.8	12.0	32.5	..	15.0
Other (6-Row)	10.4	13.9	14.3	8.2	11.5	29.1	..	11.2
Total ..	10.0	15.5	17.1	14.5	11.6	32.2	..	14.4

(a) 50 lb. per bushel.

For Australia as a whole, 83 per cent. of the area of barley for grain in 1957-58 was sown with malting or 2-row barley while the remainder consisted of 6-row, or feed, varieties. The proportion, however, varied considerably in the several States. The utilization of barley during the season 1956-57 was as follows:—exports, 27,925,000 bushels; malting and distilling, 8,041,000 bushels; pearl barley, 165,000 bushels; seed and stock feed, 9,795,000 bushels and addition to stocks, 3,353,000 bushels.

The following table sets out the acreage and production of malting and other barley in Australia during the seasons 1953-54 to 1957-58 and the averages for the ten-year periods ended 1938-39 and 1956-57.

## BARLEY, MALTING AND OTHER: AREA AND PRODUCTION, AUSTRALIA.

Season.	Area. ('000 Acres.)			Production. ('000 Bushels.)			Yield per Acre. (Bushels.)		
	Malting (2-row):	Other (6-row):	Total.	Malting (2-row):	Other (6-row):	Total.	Malting (2-row):	Other (6-row):	Total.
Average, 1929-30 to 1938-39 ..	428	67	495	7,480	1,073	8,553	17.5	16.0	17.3
1953-54 ..	1,482	321	1,803	35,923	5,349	41,272	24.2	16.7	22.9
1954-55 ..	1,391	300	1,691	25,622	3,778	29,400	18.4	12.6	17.4
1955-56 ..	1,510	384	1,894	35,470	6,185	41,655	23.5	16.1	22.0
1956-57 ..	1,705	388	2,093	43,870	5,408	49,278	25.7	13.9	23.5
Average, 1947-48 to 1956-57 ..	1,171	223	1,394	26,324	3,637	29,961	22.5	16.3	21.5
1957-58 ..	1,758	363	2,121	26,404	4,062	30,466	15.0	11.2	14.4

A graph showing the production of barley appears on page 873.

During the last ten-year period shown, the average area of barley of the malting, or 2-row, class was over five times the corresponding figure for barley of the 6-row, or feed, class. The yield per acre for malting barley was 38 per cent. higher than that for 6-row barley.

2. Australian Barley Board.—Following the outbreak of war in 1939, the Australian Barley Board, representative of the whole industry, was formed, and the Commonwealth

Government acceded to its request to acquire the entire 1939-40 barley crop, which was placed under the control of the Board. A pool was established from which proceeds were distributed with appropriate margins for different grades of barley. The Board was responsible for the marketing and storage of barley, and, like the Australian Wheat Board, appointed licensed receivers to receive grain on its behalf and to act as agents for all local and oversea sales.

Following the decision of the Commonwealth Government not to acquire barley in the smaller producing States after 1941-42, the pooling of barley in Queensland reverted to the control of the Queensland Barley Board (originally established in 1930) and in Western Australia, a State Barley Board was established to control marketing.

The Commonwealth Government ceased to acquire barley altogether after the 1947-48 crop, and the Victorian and South Australian Governments formed a joint board under the same name as the former Commonwealth board to market the 1948-49 and subsequent crops of the two States. Details for the seasons from 1952-53 to 1957-58 are shown in the table below.

**AUSTRALIAN BARLEY BOARD : BARLEY RECEIVED, SOLD, ETC.**

Pool.	Quantity Received.	Quantity Sold.(a)	Total Advances made per Bushel on 2-row No. 1 Grade less freight.		Total Net Payments to Growers.
			s.	d.	
	'000 bushels.	'000 bushels.			£
No. 14 (1952-53 Crop) .. ..	29,087	29,103	16	2.01	21,359,168
" 15 (1953-54 " ) .. ..	34,430	34,586	10	4.101	15,417,374
" 16 (1954-55 " ) .. ..	20,679	20,709	12	10.92	11,953,430
" 17 (1955-56 " ) .. ..	29,357	29,454	10	3.441	12,990,173
" 18 (1956-57 " ) .. ..	39,029	39,102	10	2.541	16,965,609
" 19 (1957-58 " ) .. ..	18,102	17,445	(b) 10	9	8,199,461

(a) Includes surplus in out-turn. (b) As at 11th November, 1958. At that date it was estimated that the amount still to be paid to growers was 10.339d. per bushel.

3. Prices.—The average wholesale price for 2-row English malting barley in the Melbourne market during 1957-58 was 13s. 7½d. compared with 14s. 1d. in 1956-57 and 3s. 5½d. in 1938-39.

4. Value of Barley Crop. The estimated gross value of the barley crop in each State for the 1956-57 and 1957-58 seasons and the value per acre are shown in the following table:—

**BARLEY FOR GRAIN : VALUE OF CROP.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1956-57—							
Aggregate value .. £'000	513	3,837	1,497	17,011	1,853	185	24,896
Value per acre .. £	11.6	11.1	13.1	13.9	5.4	26.1	11.9
1957-58(a)—							
Aggregate value .. £'000	503	3,280	1,913	9,786	1,878	195	17,553
Value per acre .. £	7.3	9.3	11.1	8.1	6.1	23.3	8.3

(a) Subject to revision.

5. Exports.—Exports of barley during the five years ended 1957-58 averaged 22,977,000 bushels. South Australia was the principal exporting State—Japan, the Federal Republic of Germany, the Netherlands and the United Kingdom were the principal countries to which barley was shipped. Particulars of Australian exports for the years 1953-54 to 1957-58 together with the average for the five years ended 1938-39 are shown in the following table:—

**BARLEY : EXPORTS, AUSTRALIA.**

Particulars.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Quantity .. '000 bus.	3,279	26,949	18,867	21,065	26,501	21,501
Value .. £'000	483	14,870	10,357	10,471	12,745	9,474

Imports of barley are not recorded separately.

In addition to exports of barley grain, there are also exports of Australian pearl and Scotch barley, the total for 1957-58 amounting to 171,974 lb., valued at £7,577, consigned mainly to Malaya.

6. Malt.—(i) *Production.* Details of the quantity of grain used and the production of barley malt are given in the following table:—

**BARLEY MALT : GRAIN USED AND MALT PRODUCED, AUSTRALIA.**

Particulars.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Grain used . . '000 bus.(a)	3,730	6,505	7,118	7,629	7,803	7,855
Malt produced '000 bus.(b)	3,621	6,620	7,078	7,517	7,782	7,895

(a) 50 lb. per bushel.

(b) 40 lb. per bushel.

(ii) *Exports.* Since 1952-53, the production of malt in Australia has been sufficient to meet local requirements and to provide a margin for export. Exports amounting to 748,598 bushels (value £764,630) and 988,549 bushels (value £947,845) were recorded in 1956-57 and 1957-58 respectively.

7. *World Production.*—In comparison with the barley production of other countries, that of Australia is extremely small. The main producers in 1957 were the United States of America, France and Canada. China is also normally a major producer, but details for 1957 are not available. Australian production in that year was slightly less than one per cent. of the world total.

According to preliminary results compiled by the United States Department of Agriculture, world production of barley in the year 1957 amounted to 3,155 million bushels harvested from 135.3 million acres, equivalent to a yield per acre of 23.3 bushels. This compared with the production of 3,370 million bushels in the previous year from 140 million acres, and a yield per acre of 23.9 bushels. Production over the years 1934-38 averaged 2,273 million bushels from 114.6 million acres, with an average yield of 19.8 bushels per acre.

## § 8. Rice.

The principal rice-growing areas of the world are confined almost entirely to Asia although limited quantities are grown in other countries. In Australia, rice was first cultivated at the Yanco Experimental Farm in New South Wales, but it was not grown commercially until 1924-25, when 16,240 bushels were produced from 153 acres. Favoured by high average yields and protected by tariff, rice culture made rapid progress in the Murrumbidgee Irrigation Area until local requirements were met and a small surplus became available for export. The acreage sown in this area is controlled, as the quantity of water available is limited.

The area sown in New South Wales in 1957-58 was 46,774 acres, the previous year's area being a record at 50,477 acres. Production was 5,658,133 bushels in 1957-58, the highest ever recorded.

A graph showing the production of rice appears on page 873.

The bulk of Australia's exports of rice in 1957-58 was shipped to Papua and New Guinea, the Pacific Islands, the United Kingdom and New Zealand. During the years prior to 1938-39, exports were principally to the United Kingdom.

Details relating to area, production and exports for the years 1953-54 to 1957-58, compared with the averages for the years 1934-35 to 1938-39, are shown in the following table:—

RICE : AREA, PRODUCTION AND TRADE, AUSTRALIA.(a)

Season.	No. of Holdings Growing Rice.(b)	Area.	Production (Paddy Rice).		Average Yield (Paddy) per Acre.	Exports.(d)	
			Quantity.	Gross Value. (c)		Un-cleaned.	Cleaned.
		Acres.	'000 Bushels. (e)	£'000.	Bushels. (e)	Cwt.	Cwt.
Average, 1934-35 to 1938-39 ..	(f) 313	22,823	2,274	450	99.7	8,354	242,724
1953-54 ..	539	38,909	4,069	3,197	104.6	16,748	692,222
1954-55 ..	573	38,690	5,080	3,430	131.3	55,867	552,065
1955-56 ..	620	41,182	4,725	3,406	114.7	179,297	678,929
1956-57 ..	652	50,477	4,262	3,069	84.4	177,123	408,634
1957-58 ..	(g) 46,774	46,774	5,658	(h) 4,153	121.0	211,426	430,928

(a) Until recently rice-growing in Australia has been practically confined to New South Wales with very small acreages only being sown in Queensland and Western Australia. Production was commenced in the Northern Territory in 1956-57 but details, which are confidential, are not included in the table. (b) Twenty acres or more in area. (c) Excludes the value of straw. (d) Imports are not recorded separately. (e) 42 lb. per bushel. (f) 1938-39 figure, previous years not collected. (g) Not available. (h) Subject to revision.

In 1956, the Commonwealth Government entered into an agreement for the development of large scale rice-growing in the Northern Territory. The agreement, which was made with a company financed by American and Australian interests, granted a 30 year lease over 750,000 acres of sub-coastal plains east of Darwin and provided for the development of 500,000 acres of land for rice-growing within 15 years. Production of rice has commenced, but, as only one company is involved, details of area and production are confidential and not available for publication.

### § 9. Sorghum for Grain.

The growing of sorghum for grain on an extensive scale is a recent development in Australia. No details of the area and production of this cereal are available prior to 1939-40, but the output was of little importance. The climatic conditions of Queensland and northern New South Wales are particularly suited to the growing of sorghum and so far, development has been restricted mainly to these areas, and more particularly to Queensland which accounts for the greater portion of the area sown. The grain produced is fed to livestock and has become an important source of supply for supplementing other coarse grains for the feeding of livestock. Other sorghums are grown in Australia mainly as green fodder, hay and silage (sweet sorghums and Sudan grass) and for the production of brush for broom manufacture (broom millet). Particulars of the area and production of sorghum grown for grain are given in the following table.

GRAIN SORGHUM : AREA, PRODUCTION AND YIELD PER ACRE, AUSTRALIA.

Season.	Area.			Production.(a)			Yield per Acre.(a)		
	N.S.W.	Q'land.	Total.	N.S.W.	Q'land.	Total.	N.S.W.	Q'land.	Total.
	Acres.	Acres.	(b) Acres.	Bushels. (c)	Bushels. (c)	Bushels. (c)	Bushels. (c)	Bushels. (c)	Bushels. (d)
1939-40 ..		4,397	(d) 4,397		57,936	(d) 57,936		13.2	(d) 13.2
1953-54 ..	7,053	181,819	188,872	129,063	4,039,779	4,168,842	18.3	22.2	22.1
1954-55 ..	13,069	202,532	215,688	272,604	5,082,762	5,356,335	20.9	25.1	24.8
1955-56 ..	23,697	155,527	179,298	662,973	3,960,195	4,624,273	28.0	25.5	25.8
1956-57 ..	34,585	171,705	206,659	671,331	4,243,227	4,919,247	19.4	24.7	23.8
1957-58 ..	47,017	166,979	214,442	521,325	3,885,567	4,407,500	11.1	23.3	20.6

(a) 60 lb. per bushel. (b) Includes small areas sown and quantities produced in other States. (c) Not available. (d) Queensland only.

## § 10. Potatoes.

1. Area, Production and Yield per Acre.—Victoria possesses particular advantages for the growing of potatoes, as the rainfall is generally satisfactory and the climate is unfavourable to the spread of Irish blight; consequently, the crop is widely grown. The principal areas of that State are the central highlands and the south-western and Gippsland districts. Tasmania comes next in order of acreage sown, although the production exceeded that of Victoria in some of the war years. New South Wales occupies third place in acreage and production. The areas sown in these three States accounted for 75 per cent. of the total for Australia in 1957–58.

The area sown, production and yield per acre of potatoes in each State during the years 1953–54 to 1957–58 and the averages for the ten-year periods ended 1938–39 and 1956–57 are shown hereunder:—

## POTATOES : AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
AREA (ACRES).									
Average, 1929–30 to 1938–39 ..	19,199	54,658	11,039	5,042	4,953	34,684	(a)	30	129,605
1953–54 ..	16,513	52,745	9,382	7,023	8,068	34,524	(a)	112	128,367
1954–55 ..	13,897	44,075	9,621	6,037	7,563	26,209	5	71	107,478
1955–56 ..	13,270	37,020	10,202	5,373	6,826	20,842	..	74	93,607
1956–57 ..	14,959	39,706	12,925	5,677	8,558	19,125	..	100	101,050
Average, 1947–48 to 1956–57 ..	17,755	47,682	10,949	6,659	7,295	30,596	(a)	111	121,047
1957–58 ..	17,326	49,846	14,400	6,260	8,322	21,696	4	92	117,946
PRODUCTION (TONS).									
Average, 1929–30 to 1938–39 ..	44,122	150,238	18,100	20,202	23,410	94,500	(a)	63	350,635
1953–54 ..	58,046	213,714	32,628	45,044	53,708	144,300	(a)	514	547,954
1954–55 ..	47,700	206,577	30,651	38,362	43,565	101,000	4	330	468,189
1955–56 ..	44,162	163,239	37,561	36,460	42,079	77,930	..	439	401,870
1956–57 ..	54,459	227,307	49,499	43,665	53,741	89,700	2	601	518,974
Average, 1947–48 to 1956–57 ..	54,682	178,065	33,061	39,548	45,925	119,848	(a)	613	471,742
1957–58 ..	66,689	251,159	56,468	49,965	49,229	101,500	3	420	575,433
YIELD PER ACRE (TONS).									
Average, 1929–30 to 1938–39 ..	2.30	2.75	1.64	2.50	4.73	2.72	(a)	2.09	2.71
1953–54 ..	3.52	4.05	3.48	6.41	6.66	4.18	(a)	4.59	4.27
1954–55 ..	3.43	4.69	3.19	6.35	5.76	3.85	0.80	4.65	4.36
1955–56 ..	3.33	4.41	3.68	6.79	6.16	3.74	..	5.93	4.29
1956–57 ..	3.64	5.73	3.83	7.69	6.28	4.69	..	6.01	5.14
Average, 1947–48 to 1956–57 ..	3.08	3.73	3.02	5.94	6.30	3.92	(a)	5.52	3.90
1957–58 ..	3.85	5.04	3.92	7.98	5.92	4.68	0.75	4.57	4.88

(a) Not available.

After the outbreak of war in the Pacific in December, 1941, the area sown to potatoes increased rapidly and reached a maximum of 241,803 acres in 1944–45. Areas sown in subsequent seasons were considerably less, however, and the figure for 1957–58 was 117,946 acres.

The average yield in Australia for 1957–58 was 4.88 tons per acre compared with the record of 5.14 tons in the previous year.

2. **Gross Value of Potato Crop.**—The estimated gross value of the potato crop of each State for the 1956-57 and 1957-58 seasons and the value per acre are shown in the following table.

**POTATOES: VALUE OF CROP.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
1956-57—								
Aggregate value £'000	2,334	5,862	4,034	1,879	1,982	1,847	17	17,955
Value per acre £	156	148	312	331	232	97	170	178
1957-58(a)—								
Aggregate value £'000	1,451	3,326	1,400	939	1,386	1,458	9	9,969
Value per acre £	84	67	97	150	166	67	91	85

(a) Subject to revision.

3. **Consumption.**—The annual consumption of potatoes in Australia during each of the three years 1955-56 to 1957-58 amounted to 368,900 tons, 459,500 tons and 518,100 tons respectively, or 88.7 lb., 108.0 lb. and 119.1 lb. respectively per head of population. These figures exclude the quantities used for seed, which averaged about 53,000 tons annually over this period. Consumption during the three years ended 1938-39 averaged 318,500 tons (103.8 lb. per head of population) excluding 37,000 tons for seed. New South Wales, Queensland and, in some seasons, South Australia do not produce the quantities necessary for their requirements and must import from Tasmania and Victoria, which have a surplus.

4. **Marketing.**—Commonwealth control of potato marketing under war-time legislation ceased at the end of 1948 with the completion of sales of the 1947-48 crop.

Potato Marketing Boards were subsequently established in all States under separate State legislation. The Queensland Board was not extended when its term ended in 1954, and the New South Wales Board was voted out by growers in 1956. As the Victorian Board does not acquire the State crop, potato marketing is now conducted chiefly on an open marketing system.

5. **Exports.**—Prior to the 1939-45 War, small quantities of potatoes were exported, principally to the Pacific Islands and Papua. After the war, the export trade expanded considerably. It reached a peak in 1952-53 but then declined. Details showing exports for the years 1953-54 to 1957-58 and the annual average for the period 1934-35 to 1938-39 are given in the following table:—

**POTATOES: EXPORTS, AUSTRALIA.**

Particulars.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Quantity .. tons	1,884	4,010	3,473	3,478	3,958	7,410
Value .. £'000	17	155	109	225	263	227

Imports of potatoes are not recorded separately.

### § 11. Onions.

1. **Area, Production and Yield per Acre.**—Australia's supply of onions comes chiefly from Victoria, which accounted for 47.4 per cent. of the total area and 56.4 per cent. of the quantity produced in 1957-58. Queensland was next with 38.0 per cent. of the area and 25.9 per cent. of the production, leaving a balance of 14.6 per cent. of area and 17.7 per cent. of production distributed among the remaining four States. The Victorian crop consists almost entirely of brown onions of good keeping qualities, and the bulk of the crop is grown in a small section of the Western Division of the State, where soil conditions have been found to be particularly suitable for onion growing on a commercial scale. Details of the area, production and yield per acre are given in the following table for the years 1953-54 to 1957-58 together with averages for the ten-year periods ended 1938-39 and 1956-57.

## ONIONS : AREA, PRODUCTION AND AVERAGE YIELD.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
AREA (ACRES).								
Average, 1929-30 to 1938-39 .. ..	124	6,159	840	450	109	5	3	7,690
1953-54 .. ..	270	3,641	2,497	471	375	18	7	7,279
1954-55 .. ..	285	3,970	2,807	512	390	21	9	7,994
1955-56 .. ..	318	3,337	2,480	524	321	22	8	7,010
1956-57 .. ..	532	4,503	3,258	608	428	28	5	9,362
Average, 1947-48 to 1956-57 .. ..	350	4,458	2,636	531	399	28	6	8,408
1957-58 .. ..	498	5,368	4,296	694	415	37	9	11,317

PRODUCTION (TONS).								
Average, 1929-30 to 1938-39 .. ..	354	35,431	2,548	3,414	814	20	11	42,592
1953-54 .. ..	1,325	22,783	11,957	4,975	4,626	87	14	45,767
1954-55 .. ..	1,340	26,091	12,243	4,790	4,322	107	71	48,964
1955-56 .. ..	1,759	20,299	9,157	4,911	3,547	140	42	39,855
1956-57 .. ..	2,669	26,811	14,279	5,611	4,606	114	32	54,122
Average, 1947-48 to 1956-57 .. ..	1,491	28,967	11,464	5,226	4,194	136	36	51,514
1957-58 .. ..	2,343	40,678	18,653	5,945	4,149	186	76	72,030

YIELD PER ACRE (TONS).								
Average, 1929-30 to 1938-39 .. ..	2.85	5.75	3.03	7.59	7.47	4.00	3.67	5.54
1953-54 .. ..	4.91	6.26	4.79	10.56	12.34	4.83	2.00	6.29
1954-55 .. ..	4.70	6.57	4.36	9.36	11.08	5.10	7.89	6.13
1955-56 .. ..	5.53	6.08	3.69	9.37	11.05	6.36	5.25	5.69
1956-57 .. ..	5.02	5.95	4.38	9.23	10.76	4.07	6.40	5.78
Average, 1947-48 to 1956-57 .. ..	4.26	6.50	4.35	9.84	10.51	4.86	6.00	6.13
1957-58 .. ..	4.70	7.58	4.34	8.57	10.00	5.03	8.44	6.36

2. **Gross Value of Onion Crop.**—The estimated gross value of the onion crop and the value per acre are shown in the following table for the 1956-57 and 1957-58 seasons:—

## ONIONS : VALUE OF CROP, 1956-57.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
1956-57—								
Aggregate value £'000	194	861	985	327	144	4	1	2,516
Value per acre £	365	191	302	538	336	159	264	269
1957-58(a)—								
Aggregate value £'000	78	637	295	154	100	8	2	1,274
Value per acre £	157	119	69	222	241	205	262	113.

(a) Subject to revision.

3. **Consumption.**—The annual consumption of onions in Australia averaged 55,082 tons or 12.9 lb. per head of population during the three years ended 1957-58, compared with 40,600 tons or 13.2 lb. per head during the three years ended 1938-39. These figures exclude an estimated wastage which averaged 3,000 tons and 2,100 tons respectively.

4. **Exports.**—Onions are the only root crop, other than potatoes, in which any considerable overseas trade is carried on by Australia. In 1957–58, exports amounted to 4,562 tons, valued at £134,517, and were shipped mainly to Singapore, Canada, New Caledonia, Hong Kong and Mauritius. The quantity of exports in 1956–57 was 2,473 tons, valued at £114,106. Imports of onions are not recorded separately.

### § 12. Hay.

1. **General.**—(i) *Area and Production.* As already stated, the chief crop in Australia in terms of area, is wheat grown for grain. Up to and including 1946–47, hay was next, but in recent years it has dropped in relative importance. In 1957–58, the areas planted to green fodder and oats for grain were larger than that sown to hay.

In 1957–58, the hay area represented 10.4 per cent. of the total area cropped. A graph showing the area sown to hay crops since 1900–01 appears on page 871. In most European countries, the hay consists almost entirely of meadow and other grasses, but in Australia a very large proportion consists of oats, lucerne and wheat. The area, production and yield per acre of hay of all kinds in the several States during the years 1953–54 to 1957–58 and the averages for the ten-year periods ended 1938–39 and 1956–57 are shown below:—

#### HAY : AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
AREA ('000 ACRES).								
Average, 1929–30 to 1938–39 ..	757	1,111	68	541	432	83	2	2,994
1953–54 ..	450	807	71	262	219	123	3	1,935
1954–55 ..	524	739	76	257	289	96	3	1,984
1955–56 ..	562	879	63	326	269	137	5	2,241
1956–57 ..	367	782	45	299	242	123	3	1,861
Average, 1947–48 to 1956–57 ..	420	701	60	270	227	105	3	1,786
1957–58 ..	554	871	69	291	339	110	3	2,237
PRODUCTION ('000 TONS).								
Average, 1929–30 to 1938–39 ..	959	1,263	104	577	464	120	3	3,490
1953–54 ..	639	1,361	140	369	294	241	5	3,049
1954–55 ..	680	1,208	171	330	305	158	4	2,856
1955–56 ..	846	1,526	137	461	384	261	10	3,625
1956–57 ..	538	1,423	96	453	289	238	6	3,043
Average, 1947–48 to 1956–57 ..	602	1,168	123	381	282	187	5	2,748
1957–58 ..	535	1,413	122	304	386	205	4	2,969
YIELD PER ACRE (TONS).								
Average, 1929–30 to 1938–39 ..	1.27	1.14	1.54	1.07	1.07	1.44	1.21	1.17
1953–54 ..	1.42	1.69	1.99	1.41	1.34	1.96	1.52	1.58
1954–55 ..	1.30	1.63	2.25	1.28	1.05	1.64	1.33	1.44
1955–56 ..	1.51	1.74	2.17	1.41	1.42	1.91	2.08	1.62
1956–57 ..	1.47	1.82	2.12	1.52	1.19	1.94	1.81	1.63
Average, 1947–48 to 1956–57 ..	1.43	1.66	2.05	1.41	1.24	1.78	1.66	1.54
1957–58 ..	0.96	1.62	1.77	1.05	1.14	1.86	1.39	1.33

For a number of reasons, particularly the variations in the relative prices of grain and hay and the favourableness or otherwise of the season for a grain crop, the area of hay is apt to fluctuate considerably. The area under hay in Australia during the season 1915–16, 3,598,000 acres, was the largest on record, whilst the average for the ten-years ended 1956–57 was 1,786,000 acres.

A graph showing the production of hay appears on page 873.

(ii) *Varieties Grown.* Information regarding areas cut for hay in 1957–58 is given in the following table.

**HAY : AREA UNDER VARIOUS KINDS GROWN, 1957-58.**  
(Acres.)

State.	Wheaten.	Oaten.	Lucerne.	Other.	Total.
New South Wales .. ..	209,198	105,799	164,604	75,179	554,780
Victoria .. ..	36,065	208,724	51,622	574,547	870,958
Queensland .. ..	18,528	3,609	39,851	6,854	68,842
South Australia .. ..	71,517	100,545	20,387	98,477	290,926
Western Australia .. ..	73,947	179,607	523	84,906	338,983
Tasmania .. ..	2,466	12,953	709	94,036	110,164
Australian Capital Territory ..	328	1,094	1,190	84	2,696
<b>Australia .. ..</b>	<b>412,049</b>	<b>612,331</b>	<b>278,886</b>	<b>934,083</b>	<b>2,237,349</b>

For all States and the Territories combined, the proportions of the areas sown to the principal kinds of hay in 1957-58 were 27 per cent. for oaten, 18 per cent. for wheaten, 13 per cent. for lucerne, and 42 per cent. for other hay. In that year, wheaten hay predominated in New South Wales, oaten hay in South Australia and Western Australia, lucerne in Queensland, and meadow and grass in the remaining States.

2. **Value of Hay Crop.**—The following table shows the estimated gross value, and the value per acre, of the hay crop of the several States for the 1956-57 and 1957-58 seasons:—

**HAY : VALUE OF CROP.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
1956-57—								
Aggregate value £'000	5,197	15,230	1,699	3,670	2,626	1,996	106	30,524
Value per acre £	14.2	19.5	37.3	12.3	10.8	16.2	33.5	16.4
1957-58(a)—								
Aggregate value £'000	8,887	17,890	3,038	3,991	3,735	1,628	108	39,277
Value per acre £	16.0	20.5	44.1	13.7	11.0	14.8	40.1	17.6

(a) Subject to revision.

3. **Farm Stocks of Hay.**—Details of stocks of hay held on farms are now collected at the annual census of farm production. Particulars of stocks so held at 31st March in each year 1954 to 1958 are given in the table below.

**STOCKS OF HAY HELD ON FARMS.**  
(Tons.)

31st March—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
1954 ..	700,367	1,479,299	106,794	420,423	216,023	185,549	4,775	3,113,230
1955 ..	809,263	1,553,289	156,115	447,102	207,664	145,112	3,269	3,321,814
1956 ..	830,619	1,870,214	149,187	474,456	306,586	270,138	7,778	3,908,978
1957 ..	775,464	2,008,678	156,599	555,681	222,941	296,257	7,617	4,023,237
1958 ..	553,691	1,643,876	89,897	384,143	211,069	256,199	3,492	3,142,367

4. **Exports.**—Under normal conditions, hay, whether whole or in the form of chaff, is somewhat bulky for oversea trade, and consequently does not figure largely amongst the exports of Australia. During 1957-58, exports amounted to 2,364 tons, valued at £55,604. Imports are not recorded separately.

### § 13. Green Fodder.

1. **Nature and Extent.**—Considerable areas are devoted to the growing of green fodder, mainly in connexion with the dairying industry. In the 1957-58 season, green fodder ranked second after wheat in area of crops throughout Australia. The areas recorded in respect of green fodder include areas of crops cut for feeding to live-stock as green fodder, or ensilage, together with areas fed off to stock as green forage. Included with the latter

are areas which may have been sown with the intention of harvesting for grain, but which, due to adverse seasonal conditions, showed no promise of producing grain or even hay and were fed off to live-stock. The principal crops cut for green fodder are oats, wheat and lucerne, while small quantities of barley, sorghum, maize, rye and sugar-cane are also used in this way. In 1957-58, the area under green fodder (3,039,293 acres) consisted of oats (1,732,093 acres), lucerne (438,374 acres), wheat (186,663 acres), sorghum (101,824 acres), barley (171,852 acres), maize (44,573 acres), rye (26,788 acres), sugar-cane (3,659 acres) and other crops (333,467 acres). Particulars concerning the area of green fodder in the several States during each of the years 1953-54 to 1957-58 are given in the following table, together with the average for the period of ten years ended 1938-39.

**GREEN FODDER : AREA.**  
(Acres.)

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
Average, 1929-30 to 1938-39 ..	482,989	(a)	347,804	106,820	189,332	24,255	(a)	656	(a)
1953-54 ..	761,552	56,210	663,097	365,301	507,756	60,127	(a)	1,218	2,415,261
1954-55 ..	934,395	77,135	649,607	360,359	639,086	70,945	32	988	2,732,547
1955-56 ..	826,789	75,815	689,469	334,957	666,398	54,401	..	970	2,648,799
1956-57 ..	813,642	66,490	640,316	363,562	752,072	48,435	2	772	2,685,291
1957-58 ..	993,039	85,095	714,048	421,242	770,739	54,094	4	1,032	3,039,293

(a) Not available.

2. Value of Green Fodder Crops.—The value of these crops is variously estimated in the several States, but the Australian total, excluding Western Australia, may be taken as approximately £5,900,000 for the 1956-57 season and £8,500,000 for the 1957-58 season.

### § 14. Sugar-cane.

1. Area.—Sugar-cane growing appears to have commenced in Australia in or about 1862, and is confined to New South Wales and Queensland. A brief outline of the development of the industry was included in earlier issues of the Official Year Book (see No. 38, page 985). The area of sugar-cane in Australia for the seasons 1953-54 to 1957-58 and the averages for the ten-year periods ended 1938-39 and 1956-57 are shown in the following table. In 1957-58, the total area of sugar-cane (excluding areas cut for green fodder) was 506,050 acres, the highest ever recorded.

**SUGAR-CANE : AREA.(a)**  
(Acres.)

Season.	New South Wales.			Queensland.			Australia.			Total.
	Area crushed.	Area of stand-over and newly-planted cane.	Area cut for plants.	Area crushed.	Area of stand-over and newly-planted cane.	Area cut for plants.	Area crushed.	Area of stand-over and newly-planted cane.	Area cut for plants.	
Average, 1929-30 to 1938-39 ..	9,106	9,023	140	229,327	75,409	9,368	238,433	84,432	9,508	332,373
1953-54 ..	7,787	6,869	468	332,703	120,929	12,846	340,490	127,798	13,314	481,602
1954-55 ..	6,566	8,078	474	367,640	107,512	11,589	374,206	115,590	12,063	501,859
1955-56 ..	7,522	8,728	670	365,252	104,782	12,111	372,774	113,510	12,781	499,065
1956-57 ..	9,182	9,419	522	360,932	106,734	12,450	370,114	116,153	12,972	499,239
Average, 1947-48 to 1956-57 ..	7,683	8,058	381	298,446	107,402	12,259	306,129	115,460	12,640	434,229
1957-58 ..	10,734	9,241	720	364,985	107,424	12,946	375,179	116,665	13,666	506,050

(a) Excludes areas cut for green fodder.

2. Productive and Unproductive Cane.—The areas shown in the preceding table do not include the small acreage cut for green fodder, which in 1957-58 amounted to 3,659 acres. The whole area planted is not cut for crushing during any one season, there being always a considerable amount of young and "stand-over" cane as well as a small quantity required for plants. Thus the season in which the highest acreage is recorded may not show the greatest area of productive cane cut for crushing.

3. **Production of Cane and Sugar.**—For Queensland, statistics of the production of sugar-cane are not available for seasons prior to 1897-98. In that season, the total for Australia was 1,073,883 tons, compared with 9,248,703 tons in the 1957-58 season. The record production was 10,086,517 tons in 1954-55.

The average production during the ten seasons ended 1956-57 was 7,459,362 tons of cane and 1,006,225 tons of raw sugar. Particulars of the total production of cane and sugar for the years 1953-54 to 1957-58 and the averages for the ten-year periods ended 1938-39 and 1956-57 are as follows:—

**SUGAR-CANE: PRODUCTION OF CANE AND SUGAR.**  
(Tons.)

Season.	New South Wales.		Queensland.		Australia.	
	Cane.	Sugar.(a)	Cane.	Sugar.(a)	Cane.	Sugar.(a)
Average, 1929-30 to						
1938-39 .. ..	241,402	30,317	4,461,988	626,789	4,703,390	657,106
1953-54 .. ..	263,249	34,004	8,751,063	1,220,383	9,014,312	1,254,387
1954-55 .. ..	222,213	26,301	9,864,304	1,301,245	10,086,517	1,327,546
1955-56 .. ..	284,539	36,028	8,616,163	1,135,685	8,900,702	1,171,713
1956-57 .. ..	294,087	35,918	8,978,081	1,171,879	9,272,168	1,207,797
Average, 1947-48 to						
1956-57 .. ..	274,301	33,611	7,185,061	972,614	7,459,362	1,006,225
1957-58 .. ..	303,086	36,854	8,945,617	1,256,271	9,248,703	1,293,125

(a) Raw sugar at 94 net titre.

The production of raw sugar in Australia in 1957-58 amounted to 1,293,125 tons manufactured from 9,248,703 tons of cane, compared with the record production of 1,327,546 tons in 1954-55.

Official annual data are not available regarding the total number of persons engaged in the sugar industry in New South Wales and Queensland. The number of separate holdings growing 5 acres or more of cane was 7,209 in 1957-58.

According to data obtained from the population census of 30th June, 1954, the number of persons engaged in the sugar-cane industry in New South Wales and Queensland comprised 20,185 males and 431 females, a total of 20,616 persons, of whom 4,245 were employers and 5,118 were self-employed.

4. **Average Production of Cane Sugar.**—Owing to climatic variation, comparison between the average yields of cane per productive acre in Queensland and New South Wales cannot be made accurately except on an annual basis. In New South Wales, the crop matures in from 20 to 24 months, whereas in Queensland a period of from 12 to 14 months is sufficient. Allowing for the disparity in maturing periods the average annual yields of cane per productive acre during the ten years ended 1956-57 were 35.70 tons for New South Wales, and 24.07 tons for Queensland. Similarly, the yields of sugar per acre crushed for the same period were estimated at 4.37 tons and 3.11 tons respectively. Apart from the consideration mentioned above, the yields of cane and sugar per acre crushed for Australia for the ten years ended 1956-57 were 24.37 tons and 3.29 tons respectively, as compared with 19.73 tons and 2.76 tons for the ten years ended 1938-39.

**SUGAR-CANE AND SUGAR: YIELD PER ACRE.**  
(Tons.)

Season.	New South Wales.			Queensland.			Australia.		
	Cane per acre Crushed.	Sugar per acre Crushed.	Cane to each ton of Sugar.	Cane per acre Crushed.	Sugar per acre Crushed.	Cane to each ton of Sugar.	Cane per acre Crushed.	Sugar per acre Crushed.	Cane to each ton of Sugar.
Average, 1929-30 to									
1938-39 .. ..	26.51	3.33	7.96	19.46	2.73	7.13	19.73	2.76	7.15
1953-54 .. ..	33.81	4.37	7.74	26.30	3.67	7.17	26.47	3.68	7.19
1954-55 .. ..	33.84	4.01	8.45	26.83	3.54	7.58	26.95	3.55	7.60
1955-56 .. ..	37.83	4.79	7.90	23.59	3.11	7.59	23.88	3.14	7.60
1956-57 .. ..	32.03	3.91	8.19	24.87	3.25	7.66	25.05	3.26	7.68
Average, 1947-48 to									
1956-57 .. ..	35.70	4.37	8.16	24.07	3.11	7.75	24.37	3.29	7.41
1957-58 .. ..	28.24	3.43	8.22	24.51	3.44	7.12	24.62	3.44	7.15

5. **Quality of Cane.**—The quantity of cane required to produce a ton of sugar varies with the variety planted, the district, and the season. For the ten years ended 1956-57, it required on the average 7.41 tons of cane to produce one ton of sugar, or 13.5 per cent. of its total weight, as compared with 7.15 tons for the ten years ended 1938-39. As the result of the systematic study of cane culture in Queensland and improvements in field and mill methods, the sugar content of the cane has been considerably increased since the turn of the century, when over 9 tons of cane were required to produce 1 ton of sugar. It is believed that it is the highest sugar content obtained anywhere in the world.

The Bureau of Sugar Experiment Stations in Queensland is rendering useful service to the sugar industry by advocating and demonstrating better methods of cultivation and the more scientific use of fertilizers, lime, etc., and by producing and distributing improved varieties of cane.

6. **Production and Utilization.**—Details of the production and utilization of raw sugar for the three years ended 1938-39 and each year 1952-53 to 1957-58 are shown below. It should be noted that the details of sugar production refer to the annual periods shown, without regard to the season in which the sugar was produced and include the small quantities of beet sugar produced in certain of these years. Consumption is shown in terms of refined sugar, including that consumed in manufactured products.

#### RAW SUGAR : PRODUCTION AND UTILIZATION, AUSTRALIA.

Year.	Changes in Stocks.	Pro-duction.	Exports. (a)	Miscel-laneous Uses.(b)	Consumption in Australia.(a)	
					Total.(c)	Per Head. (c)
	'000 tons.	'000 tons.	'000 tons.	'000 tons.	'000 tons.	lb.
Average, 1936-37 to						
1938-39 .. ..	+ 6.2	779.3	435.3	11.2	326.6	106.5
1953-54 .. ..	+40.8	1243.6	738.7	17.8	446.3	112.3
1954-55 .. ..	-27.1	1218.1	761.2	21.7	462.3	114.0
1955-56 .. ..	+40.5	1158.0	617.0	21.7	478.8	115.7
1956-57 .. ..	+18.6	1217.7	698.8	20.0	480.3	112.8
1957-58 .. ..	-23.3	1222.2	733.8	21.1	490.6	112.8

(a) Includes sugar content of manufactured products.  
(c) In refining.

(b) Includes industrial uses and losses

7. **Consumption in Factories.**—The quantity of sugar used in factories in 1956-57 amounted to 275,964 tons compared with 266,065 tons in 1955-56 and 123,883 tons in 1938-39. Particulars of sugar used in establishments not classified as factories are not available, and consequently these quantities are deficient to that extent. In 1956-57, consumption by factories engaged in the production of jams, jellies and preserved fruit (including condiments, pickles, etc.) amounted to 73,789 tons and by those producing confectionery, ice cream, etc., amounted to 58,371 tons.

8. **Control of Cane Production in Queensland.**—Agreements between the Commonwealth and Queensland Governments have fixed the wholesale price of sugar and sugar products from time to time. Details of prices are shown in para. 14 of this section (see page 907.)

The Queensland Government acquires the whole of the sugar production of that State and of New South Wales by legislation and private agreement respectively. The net proceeds of all sugar sold are pooled and a uniform price paid to mills.

Sugar production barely met local requirements in 1923 but increased rapidly until 1925 when approximately 44 per cent. of the production was exported. Steps were taken by the Government to restrict planting of new areas and production was fairly stable until 1929. In that year, the pool was reorganized and mills received the full pool price for sugar up to the amount of their previous maximum production, further output being acquired at export prices.

Between 1929 and 1939, production rose by more than 70 per cent. despite the restrictions above-mentioned and the fact that export prices were generally less than half the pool price.

In 1939, following the International Sugar Agreement, which limited exports, the Queensland Government limited the pool (mill peaks) to 737,000 tons in respect of Queensland production. Mill quotas were allotted on the understanding that mills would allot

quotas to individual growers. Mill peaks have been raised since 1939, following the negotiation of the Commonwealth Countries Sugar Marketing Agreement of 1949, which allowed the Queensland Government to initiate a planned expansion of the industry. In 1957, they were 1,203,900 tons and in 1958, 1,207,400 tons.

9. **Sugar Agreement in Australia—Embargo on Imports, etc.**—Reference was made in Official Year Book No. 37, pages 940–41, to the agreement operating between the Commonwealth and Queensland Governments in respect of the sugar industry in Australia. Briefly, the agreement places an embargo on sugar importations and fixes the price of sugar consumed in Australia. The current agreement operates for a five year period from 1st September, 1956 to 31st August, 1961.

10. **International Sugar Agreement.**—The International Sugar Agreement of 1937 was superseded by the International Sugar Agreement of 1953 which came into force on 1st January, 1954. Details of the 1937 Agreement were given in Official Year Book No. 40, pages 881 and 882, and previous issues.

The 1953 agreement, which was amended by protocol from 1st January, 1957, was for the five year period ended 31st December, 1958.

In October, 1958, a new agreement was negotiated at a conference held in Geneva under the auspices of the United Nations. The new agreement, which follows the lines of the 1953 agreement, is for five years commencing 1st January, 1959, with provision for a review during the third year. It is designed to assure supplies of sugar to importing countries and markets for sugar to exporting countries at equitable and stable prices, to facilitate a steady increase in the consumption of sugar and a corresponding increase in the supply of sugar, and in general, to further international co-operation in connexion with world sugar problems. Basic export quotas of exporting countries are established and provision is made for adjustment of quotas according to fluctuations in the world sugar price. A number of price levels are stipulated at which the International Sugar Council may or must take action. The Council has considerable discretion to adjust quotas during the quota year.

Under the 1953 agreement, the British Commonwealth, as a whole, was granted an export quota of 2,375,000 tons rising to 2,500,000 tons in 1958. Under the 1958 agreement, the quota remains at 2,500,000 tons for 1959 but is increased by 75,000 tons to 2,575,000 tons in 1960 and 1961. This quota is not subject to the fluctuations mentioned above. The allocation of the total quota among exporting members of the British Commonwealth is a matter for internal arrangement by those countries and territories themselves. Australia's quota for 1959 will be approximately 631,000 tons and will increase to about 650,000 tons in 1960 and 1961.

Details of the marketing arrangements for Australian sugar are given in paragraph 15 below.

11. **Net Return for Sugar Crop.**—Details of the disposal of the crop, net value of exports and the average price realized during each of the years 1938–39 and 1953–54 to 1957–58 will be found in the following table:—

**RAW SUGAR(a) : NET RETURNS, AUSTRALIA.**

Year.	Proportion Exported. (b)	Net Value of Exports per Ton. (b)	Average Price per Ton for Whole Crop.		Estimated Value of Crop.
			£	s. d.	
1938–39 .. ..	55.78	£ 8 4 3	15 3 11	£'000.	12,806
1953–54 .. ..	58.39	38 13 9	42 10 8		52,572
1954–55 .. ..	59.11	37 8 0	41 6 11		53,984
1955–56 .. ..	53.46	38 11 4	42 9 0		53,244
1956–57 .. ..	56.01	41 6 5	46 14 3		57,686
1957–58 .. ..	57.44	45 5 11	49 7 6	(c)	64,194

(a) 94 net titre.

(b) As supplied by the Queensland Sugar Board.

(c) Subject to revision.

The estimated value of the raw sugar produced has been based upon details taken from the audited accounts of the Queensland Sugar Board. The values stated represent the gross receipts from sales in Australia and overseas, less refining costs, freight, administrative charges, etc., and export charges, but including concessions to the fruit industry and other rebates which in 1957-58 amounted to £364,951. The value thus obtained represents the net market value of all raw sugar sold, which is divided between the growers and millers in the approximate proportions of 70 per cent. and 30 per cent. respectively.

12. **Exports of Sugar.**—Particulars of the exports of cane sugar (raw and refined) for the five years ended 1938-39 and for each year from 1953-54 to 1957-58 are as follows:—

## SUGAR : EXPORTS, AUSTRALIA.

Particulars.		Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Quantity	tons	377,930	706,801	737,184	592,229	675,282	707,806
Value	£'000	3,481	31,592	31,148	24,723	28,780	34,996

13. **Sugar By-products.**—Large quantities of molasses are produced as a by-product in the sugar mills. Details for a series of years of the quantities produced and the amounts used for distilling, fuel, manure and other purposes will be found in Chapter VI.—Manufacturing Industry.

Other by-products include industrial chemicals and building boards. These boards are made from the residue of crushed fibre after removal of the sugar content from sugar-cane and possess high insulating and sound-absorbing properties which make them particularly suitable for use in walls and ceilings.

14. **Sugar Prices.**—The prices of sugar in Australia from 1952 to 1957 in the case of raw sugar; and from 1952 to 1961 in the case of refined sugar (as determined under the Sugar Agreement in Australia—See para. 9 above) are shown in the following table.

## SUGAR : PRICES IN AUSTRALIA.

Year.	Raw Sugar, 94 Net Titre.			Refined Sugar.		
	Average Return per Ton Received by Millers and Growers for—			Date of Determination.	Wholesale Price per Ton.	Retail Price per lb.
	Home Consumption.	Exports.(a)	Whole Crop. (a)			
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	d.	
1952 ..	44 3 0	41 2 0	42 12 9	24.3.52 to 12.10.52	65 12 10	8
1953 ..	47 18 6	38 13 9	42 10 8	13.10.52 to 13.5.56	73 16 11	9
1954 ..	47 1 0	37 8 0	41 6 11	14.5.56 to 31.8.61	82 1 0	10
1955 ..	46 18 0	38 11 6	42 9 0			
1956 ..	53 11 6	41 6 5	46 14 3			
1957 ..	54 3 0	45 5 11	49 7 6			

(a) Including "Excess" Sugar.

15. **Marketing Arrangements.**—From 1939 to 1952, the British Ministry of Food purchased Australia's surplus raw sugar at prices negotiated annually and varying from £ stg. 11 5s. in 1939 to £ stg. 38 10s. a ton in 1952 including tariff preference (for prices in other years see earlier issues of the Year Book).

On 1st January, 1953, the British Commonwealth Sugar Agreement became effective. This agreement, which has been extended to 1965, provides for Australia to export a maximum of 600,000 tons per annum. The United Kingdom agrees to take 300,000 tons at an annually negotiated price, the balance being sold at world prices, plus tariff preferences. The negotiated prices for 1957 and 1958 were £ stg. 42 3s. 4d. and £ stg. 43 16s. 8d. a ton, respectively.

— The Sugar Bill introduced into the House of Commons on 5th July, 1955, provided for the reversion of dealings in sugar in the United Kingdom to a trader to trader basis as

from 1st January, 1957. However, under the Bill, a Sugar Board was created which is responsible for the purchase of the negotiated price sugar which the United Kingdom Government has contracted to take under the British Commonwealth Sugar Agreement.

**16. Fruit Industry Sugar Concession Committee and Sugar Rebates.**—The Fruit Industry Sugar Concession Committee was established by agreement between the Commonwealth and Queensland Governments and administers a fund contributed by the Queensland Government on behalf of the Sugar Industry.

A rebate of £2 4s. per ton of refined sugar used in processing approved fruit products is paid to Australian manufacturers provided they buy the fresh fruit at prices not lower than those declared by the Committee as reasonable.

An export sugar rebate is also paid by the Committee to exporters of approved fruit products to ensure that manufacturers do not pay higher prices for Australian sugar than the price for which the cheapest imported sugar could be landed duty free in Australia.

Under the Sugar Agreement 1956–1961, the Queensland Government contributes to the fund £120,000 annually and also reimburses the Committee for the actual expenditure on export sugar rebates. Any money remaining in the fund after the payment of rebates and administrative expenses may be used by the Committee for the promotion of the use and sale of fruit products, or for scientific research for the purpose of increasing the yield per acre of Australian fruit.

**17. Bulk Handling of Sugar.**—The conversion of the Australian sugar industry to bulk handling and mechanized loading and unloading of raw sugar is well advanced. Within the next few years 80 per cent. of raw sugar in Australia will be handled in bulk without being bagged at any stage.

Terminals for the bulk loading of sugar were opened at Mackay in 1957 and at Lucinda and Bundaberg in 1958; additional bulk terminals are in course of construction at Townsville and Mourilyan.

Bulk unloading facilities are in operation, or in the course of construction, at all Australian refineries.

## § 15. Vineyards.

**1. Progress of Cultivation.**—(i) *Area of Vineyards.* Since the early days of Australian settlement, the expansion of the cultivation of vines has been most rapid in Victoria and South Australia, the area under vineyards in the 1957 season in these two States comprising 78 per cent. of the total area. The purposes for which grapes are grown in Australia are (a) for wine-making, (b) for table use, and (c) for drying. The total area of vines in the several States during each of the years 1953–54 to 1957–58 and the averages for the ten-year periods ended 1938–39 and 1956–57 are shown in the following table.

### VINEYARDS: AREA.

(Acres.)

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Aust.(a)
Average, 1929–30 to						
1938–39 .. ..	15,777	40,563	2,142	54,156	5,666	118,304
1952–53 .. ..	18,006	45,968	2,808	60,603	9,233	136,618
1953–54 .. ..	18,128	45,777	2,884	62,121	9,202	138,112
1954–55 .. ..	18,205	45,757	2,896	60,612	9,015	136,485
1955–56 .. ..	18,099	44,817	2,916	59,862	9,107	134,801
1956–57 .. ..	17,394	44,902	2,916	57,409	8,996	131,617
Average, 1947–48 to						
1956–57 .. ..	17,384	45,258	2,977	60,274	9,388	135,281
1957–58—						
Wine .. ..	7,133	4,553	345	43,432	2,941	58,404
Table .. ..	2,531	2,162	2,476	243	1,597	9,009
Drying .. ..	7,320	38,052	..	13,764	4,485	63,621
<b>Total .. ..</b>	<b>16,984</b>	<b>44,767</b>	<b>2,821</b>	<b>57,439</b>	<b>9,023</b>	<b>131,034</b>

(a) Excludes particulars for Australian Capital Territory and Northern Territory

(ii) *Wine Production, Bounties, etc.* The total production of wine (beverage and distillation) in Australia has shown a marked increase in recent years, rising from 14.3 million gallons in 1938-39 to 33.9 million gallons in 1957-58. In the same period, consumption of beverage wine in Australia has expanded from 4.5 million gallons (0.7 gallons per head of population) to 11.1 million gallons (1.14 gallons per head of population). For many years prior to the 1939-45 War, a bounty was paid on wine shipped overseas under the provisions of the Wine Export Bounty Act 1930, as amended from time to time. Details of the bounty, payment of which was discontinued in 1947, may be found in Official Year Book No. 39, page 992.

The quantity of wine produced in the several States during the 1953-54 to 1957-58 seasons, together with the averages for the ten-year periods ended 1938-39, and 1956-57, are shown in the following table:—

**WINE : PRODUCTION.(a)**  
(\*000 Gallons.)

Season.	N.S.W.	Victoria.	Queensland.	S. Aust.	W. Aust.	Australia.
Average, 1929-30 to 1938-39 ..	2,099	1,449	36	12,127	393	16,104
1953-54.. ..	5,066	2,327	59	23,497	717	31,666
1954-55.. ..	2,271	1,612	61	19,208	812	23,964
1955-56.. ..	2,327	1,342	37	18,403	786	22,895
1956-57.. ..	3,412	2,369	38	24,038	886	30,743
Average, 1947-48 to 1956-57 ..	4,097	2,502	42	22,537	717	29,895
1957-58.. ..	4,150	2,583	21	26,400	700	33,854

(a) Net factory and farm production of beverage and distillation wine excluding the liquid gallonge of spirits added in wine fortifying.

2. Imports and Exports of Wine.—(i) *Imports.* Imports for 1957-58 amounted to 51,225 gallons valued at £115,519 compared with 33,505 gallons valued at £74,407 in the previous year and an average of 36,685 gallons valued at £39,577 for the five years ended 1938-39.

During 1957-58, Italy supplied 18,659 gallons valued at £21,634, France supplied 18,980 gallons valued at £60,769, and Spain supplied 5,068 gallons valued at £12,949. The bulk of the sparkling wines were obtained from France.

(ii) *Exports.* Exports in 1957-58 totalled 1,489,528 gallons, of which the United Kingdom received 1,106,240 gallons, New Zealand 44,037 gallons, Canada 279,009 gallons, and other countries 60,242 gallons.

Exports for the five years ended 1957-58 are shown in the following table in comparison with average exports during the five years ended 1938-39:—

**WINE : EXPORTS FROM AUSTRALIA.**

Year.	Quantity (Gallons).			Value (£).		
	Sparkling.	Other.	Total.	Sparkling.	Other.	Total.
Average, 1934-35 to 1938-39 ..	3,772	3,559,094	3,562,866	5,400	938,195	943,595
1953-54.. ..	4,842	1,390,118	1,394,960	16,631	886,228	902,859
1954-55.. ..	5,570	1,258,503	1,264,073	19,670	797,767	817,437
1955-56.. ..	5,997	1,197,995	1,203,992	19,833	714,235	734,068
1956-57.. ..	6,701	1,743,648	1,750,349	23,737	1,108,314	1,132,051
1957-58.. ..	4,872	1,484,656	1,489,528	18,194	978,616	996,810

3. **Oversea Marketing of Wine.**—(i) *The Wine Overseas Marketing Act 1929–1954.* This Act was introduced to place the oversea marketing of surplus wine on an orderly basis. The Australian Wine Board (formerly The Wine Overseas Marketing Board), consisting of representatives from wineries and distilleries, grape-growers and the Commonwealth Government, supervises the sale and distribution of Australian wine exported and recommends conditions under which export licences should be issued. The Board has a London agency which advises on marketing conditions.

During 1954, the Act was amended to enable the Board to engage in the sales promotion of wine in Australia in addition to overseas.

(ii) *The Wine Grapes Charges Act 1929–1957.* This Act provides for the imposition of a levy on all grapes used in Australia for the manufacture of wines or spirit used for fortifying wine. The proceeds of the levy are used to defray the administrative and other expenses of the Board, and provision is made for such exemptions from the levy as the Board may recommend.

4. **Other Viticultural Products.**—(i) *Table Grapes.* Grapes for table use are grown in all States except Tasmania, but the area of this type is only about 7 per cent. of the productive area of vines. The quantities of table grapes produced during the season 1957–58 in each State are shown in § 3 of this chapter. (See p. 869).

(ii) *Raisins and Currants.* The quantities of raisins (sultanas and lexias) and currants dried during each of the seasons 1953–54 to 1957–58 and the averages for the ten-year periods ended 1938–39 and 1956–57 are shown in the following table. Production in 1957–58 was 90,554 tons, compared with 79,857 tons in 1956–57.

#### RAISINS<sup>(a)</sup> AND CURRANTS : PRODUCTION.

(Tons.)

Season.	N.S. Wales.		Victoria.		South Aust.		Western Aust.		Australia.	
	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.
Average, 1929–30 to 1938–39	4,234	796	35,235	7,995	11,494	8,007	697	1,789	51,660	18,587
1953–54 . . . . .	8,261	591	51,073	4,669	16,451	6,326	259	2,284	76,044	13,870
1954–55 . . . . .	7,873	663	49,368	4,675	12,287	3,654	60	2,172	69,588	11,164
1955–56 . . . . .	4,313	725	29,417	5,150	11,699	5,009	95	2,463	45,524	13,347
1956–57 . . . . .	9,380	585	50,085	3,954	9,716	3,941	148	2,048	69,329	10,528
Average, 1947–48 to 1956–57 . . . . .	6,738	813	43,294	5,796	10,859	5,392	297	2,392	61,188	14,393
1957–58 . . . . .	10,608	674	56,742	4,153	11,306	4,824	111	2,136	78,767	11,787

(a) Including sultanas and lexias.

5. **Production and Disposal of Dried Vine Fruit.**—As the production of dried vine fruit is far in excess of Australia's requirements, considerable quantities are available for export. Total production during the 1957–58 season amounted to 90,554 tons, whilst exports for the 12 months ended December, 1958, were 74,884 tons, leaving an estimated 15,670 tons available for Australian consumption. Australian consumption includes amounts delivered to biscuit manufacturers, bakeries, etc., as well as retail sales for household consumption.

The following table shows the oversea exports of raisins and currants during each of the years 1953–54 to 1957–58 compared with the average for the five years ended 1938–39.

## RAISINS AND CURRANTS(a) : EXPORTS, AUSTRALIA.

Year.	Raisins.		Currants.		Total Raisins and Currants.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons.	£'000.	Tons.	£'000.	Tons.	£'000.
Average, 1934-35 to 1938-39 ..	43,191	1,686	15,054	549	58,245	2,235
1953-54 ..	51,693	5,561	10,731	1,039	62,424	6,600
1954-55 ..	59,934	6,720	8,373	917	68,307	7,637
1955-56 ..	51,734	6,224	9,561	1,151	61,295	7,375
1956-57 ..	38,496	5,377	6,521	831	45,017	6,208
1957-58 ..	52,297	8,019	7,398	938	59,695	8,957

(a) Excludes quantities exported as mincemeat.

The chief countries importing Australian raisins and currants are the United Kingdom, Canada and New Zealand, the quantities exported thereto in 1957-58 being 35,918 tons, 14,949 tons and 4,679 tons respectively.

6. *Post-war Contracts.*—Agreements were negotiated between the Governments of the United Kingdom and Australia for the purchase of Australian dried vine fruits during the period 1946-1953. Up to and including 1951, the quantity of fruit to be purchased was limited but in 1952 and 1953 there was no restriction. In April, 1953, it was agreed to extend the contract for one year but in August, 1953, the United Kingdom Government abolished all controls and on 1st December of that year exports reverted to a trader basis. The British Ministry of Food agreed, however, to subsidize returns from sales of fruit of the 1954 crop sold in the United Kingdom up to 31st May, 1955, if average returns were less than the level of prices agreed upon.

7. *Oversea Marketing of Dried Fruits.*—(i) *The Dried Fruits Export Control Act 1924-1953.* This Act was passed to organize oversea marketing of Australian dried vine fruits. The Dried Fruits Control Board, consisting of growers representatives, members with commercial experience and experience in marketing dried fruits and a Government representative, controls the sale and distribution of dried fruit exports and recommends the conditions under which export licences are issued.

In conjunction with its London agency, the Board has improved dried fruit marketing overseas by its system of appraisal, regulation of shipments and advertising.

(ii) *Dried Fruits Export Charges Act 1924-1929.* This Act provides for a levy on exports of dried fruits to defray costs and expenses incurred by the Board. Provision is made for exemption from the levy upon recommendation by the Board.

## § 16. Orchards and Fruit-gardens.

1. *Area.*—The largest area of orchards and fruit-gardens prior to the 1939-45 War was 281,899 acres which was attained in 1933-34. Since then, the acreage has varied but has not fallen below 260,000 acres. The peak was reached in 1947-48 when 290,000 acres were planted; in 1957-58 the area was 276,000 acres.

ORCHARDS AND FRUIT-GARDENS : AREA.  
(Acres.)

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Average, 1929-30 to 1938-39 ..	84,025	76,643	32,437	29,365	20,703	32,627	(a)	69	275,869
1933-34 ..	90,761	66,180	39,979	29,758	21,542	24,818	(a)	111	273,149
1934-35 ..	91,124	66,091	42,517	30,507	21,475	23,687	102	122	275,625
1935-36 ..	93,482	65,214	41,253	32,998	21,943	23,795	104	118	278,907
1936-37 ..	87,920	63,319	39,561	33,998	22,040	22,994	94	113	270,039
1937-38 ..	88,170	66,221	40,856	35,295	22,186	23,013	81	93	275,915

(a) Not available.

2. **Varieties of Crops.**—The varieties of fruit grown differ in various parts of the States, ranging from pineapples, papaws and mangoes in the tropics, to strawberries, raspberries and currants in the colder parts of the temperate zone. In New South Wales, citrus fruits (oranges, lemons, etc.) and bananas are the principal crops, although apples, peaches, plums, pears and cherries are grown extensively. The principal varieties grown in Victoria are apples, peaches, pears, oranges, plums and apricots. In Queensland, pineapples, apples, bananas, oranges, mandarins, peaches and plums are the varieties most largely cultivated. In South Australia, in addition to apples, oranges, apricots, plums, peaches and pears, almonds and olives are grown extensively. In Western Australia, apples, oranges, pears, plums, peaches, lemons, apricots and figs are the chief varieties. In Tasmania, apples occupy over three quarters of the fruit-growing area, but small fruits, such as currants, raspberries and gooseberries are grown, extensively while the balance of the area is mainly taken up with pears, apricots and plums. The following table shows the acreage—bearing and non-bearing—of the principal kinds of fruit, and the quantities produced.

### ORCHARDS AND FRUIT-GARDENS, 1957-58.

Fruit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
<b>AREA, BEARING AND NON-BEARING (ACRES).</b>									
Apples ..	15,408	20,524	10,134	5,495	12,892	18,062	..	80	82,595
Apricots ..	1,939	4,622	379	4,482	399	866	..	2	12,689
Bananas ..	20,951	..	5,645	..	357	..	28	..	26,981
Cherries ..	2,353	1,842	3	596	40	55	..	..	4,889
Citrus—									
Oranges ..	25,707	5,341	3,345	9,499	4,016	..	(a) 20	..	47,928
Mandarins ..	1,820	136	1,453	228	257	..	(b)	..	3,894
Lemons and Limes ..	2,384	1,590	379	357	579	..	6	..	5,295
Other ..	608	297	68	402	136	..	3	..	1,514
Nuts ..	330	615	200	3,448	194	..	..	2	4,789
Peaches ..	6,403	10,722	1,505	3,948	815	56	..	2	23,451
Pears ..	3,246	13,836	517	1,921	991	1,474	..	4	21,989
Pineapples ..	467	..	13,018	..	..	..	22	..	13,507
Plums and Prunes ..	4,617	2,440	1,313	1,326	1,010	108	..	2	10,816
Small Fruits ..	15	621	327	117	7	2,352	..	..	3,439
Other Fruits ..	1,922	3,635	2,570	3,476	493	40	2	1	12,139
<b>Total</b>	<b>88,170</b>	<b>66,221</b>	<b>40,856</b>	<b>35,295</b>	<b>22,186</b>	<b>23,013</b>	<b>81</b>	<b>93</b>	<b>275,915</b>

### PRODUCTION.

Apples '000 bus.	1,667	3,125	692	1,220	1,359	6,635	..	5	14,703
Apricots ..	233	692	13	506	41	90	..	..	1,575
Bananas ..	2,871	..	443	..	44	..	2	..	3,360
Cherries ..	137	75	..	49	1	5	..	..	267
Citrus—									
Oranges ..	2,870	797	365	1,726	440	..	(a) 1	..	6,199
Mandarins ..	135	16	166	33	22	..	(b)	..	372
Lemons and Limes, ..	266	159	69	51	128	..	1	..	674
Other ..	143	56	19	87	24	..	..	..	329
Nuts '000 lb.	140	268	60	2,042	41	..	..	..	2,551
Peaches '000 bus.	837	1,287	69	690	77	7	..	..	2,967
Pears ..	473	3,730	37	402	99	566	..	..	5,307
Pineapples ..	89	..	3,938	..	..	..	2	..	4,029
Plums and Prunes ..	334	186	56	142	80	30	..	..	828
Small Fruits '000 cwt.	..	16	13	2	..	86	..	..	117

(a) Includes mandarins.

(b) Included with oranges.

3. **Principal Fruit Crops.**—The area and production of the principal fruit crops and the gross value of production during the seasons 1953-54 to 1957-58, compared with the average for the ten seasons 1929-30 to 1938-39, are shown hereunder.

## PRINCIPAL FRUIT CROPS : AREA, PRODUCTION AND GROSS VALUE OF PRODUCTION.

Season.	Apples.	Apricots.	Bananas.	Citrus Fruits.	Peaches.	Pears.	Plums and Prunes.
AREA, BEARING AND NON-BEARING (ACRES).							
Average, 1929-30 to 1938-39	100,258	11,632	23,353	50,706	23,390	20,725	15,912
1953-54.. ..	80,684	12,881	28,799	57,479	23,685	21,040	11,546
1954-55.. ..	79,971	13,106	30,480	57,703	24,079	21,247	11,477
1955-56.. ..	82,336	13,087	29,331	59,271	23,454	22,030	10,915
1956-57.. ..	81,965	12,493	26,981	57,189	22,020	21,499	10,679
1957-58.. ..	82,595	12,689	26,981	58,631	23,451	21,989	10,816
PRODUCTION ('000 BUSHELS).							
Average, 1929-30 to 1938-39	10,013	1,014	2,270	5,011	1,984	2,130	948
1953-54.. ..	12,469	1,744	3,322	7,445	3,335	4,442	996
1954-55.. ..	11,678	1,544	3,139	7,086	3,080	4,708	820
1955-56.. ..	13,464	1,383	4,736	8,212	2,582	4,206	842
1956-57.. ..	10,792	1,417	3,625	7,943	2,179	4,606	674
1957-58.. ..	14,703	1,575	3,360	7,574	2,967	5,307	828
GROSS VALUE OF PRODUCTION. (£'000.)							
Average, 1929-30 to 1938-39	2,677	326	1,072	1,808	679	559	286
1953-54.. ..	14,683	2,788	7,311	7,400	3,489	4,455	1,351
1954-55.. ..	13,969	2,010	7,350	8,639	3,606	4,628	1,220
1955-56.. ..	16,594	2,286	5,749	8,556	3,365	4,681	1,380
1956-57.. ..	15,188	2,731	7,288	8,367	3,724	5,483	1,398
1957-58(a) ..	19,211	2,400	9,121	10,708	3,854	6,635	1,478

(a) Subject to revision.

4. Production of Jams and Jellies and Preserved Fruit.—In Australia, considerable quantities of fruit are used in the production of jams and jellies and preserved fruit. During 1956-57, output of jams and jellies amounted to 92,208,000 lb. whilst output of preserved fruit, excluding preserved apples, amounted to 280,248,000 lb. Production of preserved apples was 9,262,000 lb.

The recorded consumption of fruit in factories for all purposes, including that used for juice and cordial manufacture and for drying, was 208,634 tons in 1956-57.

5. Consumption of Fruit and Fruit Products.—Details of the estimated consumption of fruit and fruit products per head of population for a series of years ending 1957-58 are shown in Chapter XXX.—Miscellaneous, of this Year Book.

6. Imports and Exports of Fruit.—(i) *General.* The imports of fresh fruit into Australia are negligible, whilst those of dried fruit consist mainly of dates.

A considerable export trade in both fresh and dried fruit is carried on by Australia with overseas countries. The values of the shipments in 1957-58 amounted to £13,061,942 and £9,143,179 respectively. Apples constitute the bulk of the fresh fruit exported, although exports of pears and citrus fruit are considerable.

(ii) *Fresh Fruit.* Particulars of the Australian export trade in fresh and frozen fruit for each of the years 1953-54 to 1957-58 and the average of the five years ended 1938-39 are shown in the following table:—

## FRESH AND FROZEN FRUIT: EXPORTS, AUSTRALIA.

Year.	Apples.		Pears.		Citrus.		Total.(a)	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 bus.	£'000.						
Average, 1934-35 to 1938-39 ..	4,591	1,396	632	268	533	234	5,865	1,981
1953-54 ..	4,728	6,089	1,209	2,045	533	809	6,596	9,384
1954-55 ..	4,265	5,444	1,407	2,183	525	783	6,283	8,771
1955-56 ..	5,023	6,513	1,012	1,470	585	869	6,689	9,138
1956-57 ..	3,969	5,582	1,020	1,731	613	926	5,670	8,585
1957-58 ..	5,892	9,076	1,448	2,755	572	882	7,961	13,062

(a) Total, including exports of all other fresh and frozen fruit.

(iii) *Dried Tree Fruit.* The quantity and value of oversea imports and exports of dried fruit, other than raisins and currants, for the years 1953–54 to 1957–58, compared with the average for the five years 1934–35 to 1938–39, are shown below. Normally, the bulk of the imports consists of dates obtained almost entirely from Iraq.

**DRIED TREE FRUIT(a): IMPORTS AND EXPORTS, AUSTRALIA.**

Year.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
	'000 lb.	£'000.	'000 lb.	£'000.
Average, 1934–35 to 1938–39	12,225	80	4,315	117
1953–54 .. .. .	11,638	303	6,526	795
1954–55 .. .. .	(b) 13,176	(b) 373	6,576	804
1955–56 .. .. .	(b) 8,627	(b) 204	3,681	428
1956–57 .. .. .	(b) 7,052	(b) 158	2,887	378
1957–58 .. .. .	(b) 8,683	(b) 209	1,366	186

(a) Excludes raisins and currants referred to separately under Vineyards, (see p. 910).  
of dates and figs only.

(b) Imports

(iv) *Jams and Jellies.* Exports of jams and jellies reached large proportions immediately following the 1939–45 War and in 1946–47 amounted to 65,434,000 lb., compared with the average for the five years ended 1938–39 of 7,118,000 lb. Since 1949–50, when exports totalled 65,229,000 lb., there has been a marked decline and in 1957–58 exports amounted to only 9,418,836 lb., valued at £649,497. Imports of jams and jellies are negligible.

(v) *Preserved Fruit.* The total quantity of fruit preserved in liquid, or partly preserved in liquid or pulped, imported into Australia during 1957–58, was 1,513,310 lb. valued at £109,909. Large quantities of fruit preserved in liquid are normally exported from Australia, the value of shipments in 1938–39 amounting to £1,271,525. In 1957–58, the value of exports was £12,358,092. In addition, the exports of pulped fruits during 1957–58 amounted to 1,873,170 lb., valued at £196,801. The quantity of fruit preserved in liquid exported from Australia in 1957–58 amounted to 165,151,369 lb. compared with average exports of 68,896,000 lb. for the five years ended 1938–39. Exports in 1957–58 were principally made up of pears (74,220,088 lb.), peaches (48,167,514 lb.), apricots (20,553,822 lb.) and pineapples (12,657,602 lb.).

7. *Marketing of Apples and Pears.*—(i) *Apple and Pear Organization Act 1938–1953.* This Act, which was passed by the Commonwealth Parliament at the request of the apple and pear industry, provides for the establishment of an Australian Apple and Pear Board comprising representatives of growers, exporters, employees and the Commonwealth Government. Oversea representatives may also be appointed by the Board.

The function of the Board is the organization and control of exports of fresh apples and pears and it has the power to regulate shipments, determine export quotas and allocate consignments from each State.

(ii) *Apple and Pear Export Charges Act 1938–1957.* This Act provides for an export levy to meet the expenses of the Board.

(iii) *Apple and Pear Acquisition.* Exports of apples and pears were seriously curtailed during the war and the 1940 to 1948 crops were acquired and marketed under National Security and Defence Regulations. Details of the acquisition scheme will be found on pages 1003 and 1004 of Official Year Book No. 38 and in earlier issues.

8. *Overseas Marketing of Canned Fruit.*—(i) *The Canned Fruits Export Control Act 1926–1956.* This legislation was introduced with the object of organizing the overseas marketing of canned fruit. The Australian Canned Fruits Board, comprising members representing the Commonwealth Government and canners of apricots, peaches, pears, pineapples and fruit salad, was appointed with functions mentioned above and also to recommend conditions under which export licences are issued.

The system of marketing adopted by the Board has resulted in the satisfactory disposal of the exportable surplus of canned fruits.

(ii) *The Canned Fruits Export Charges Act 1926–1956.* This Act provides for a levy on exports to meet the Board's expenses. Provision has been made for certain exemptions when recommended by the Board.

### § 17. Vegetables for Human Consumption.

1. **Area and Production of Fresh Vegetables.**—Details of the areas planted and production of individual kinds of vegetables, excluding potatoes and onions referred to in §§ 10 and 11 of this chapter, are shown below for the seasons 1955–56 to 1957–58.

#### FRESH VEGETABLES<sup>(a)</sup> FOR HUMAN CONSUMPTION : AUSTRALIA.

Vegetable.	1955–56.		1956–57.		1957–58.	
	Area Sown.	Production.	Area Sown.	Production.	Area Sown.	Production.
	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
Asparagus .. ..	4,140	4,994	4,098	4,601	3,788	5,300
Beans, French and Runner .. ..	15,609	21,722	18,000	26,064	17,517	23,217
Beans, Navy .. ..	1,022	90	999	273	1,728	266
Beetroot .. ..	2,134	12,580	2,264	13,917	2,102	13,967
Cabbages and Brussels Sprouts .. ..	6,444	65,949	7,413	77,938	6,447	69,426
Carrots .. ..	4,422	38,209	5,444	47,537	5,001	47,648
Cauliflowers .. ..	6,675	70,425	7,295	78,540	7,734	89,385
Celery <sup>(b)</sup> .. ..	590	7,527	648	8,509	653	9,949
Cucumbers <sup>(b)</sup> .. ..	1,461	5,205	1,538	5,255	1,616	5,822
Lettuces .. ..	4,228	15,412	4,393	16,114	4,595	17,017
Parsnips .. ..	1,391	11,006	1,619	12,631	1,530	12,426
Peas, Blue .. ..	5,887	3,760	8,325	5,090	7,323	3,860
Peas, Green .. ..	44,136	44,233	48,614	48,437	47,988	51,714
Tomatoes .. ..	17,082	92,095	19,908	146,800	17,096	119,964
Turnips, Swede and White .. ..	5,896	26,862	5,427	22,688	4,670	18,701
All Other .. ..	34,181	..	35,815	..	33,761	..
<b>Total .. ..</b>	<b>155,298</b>	<b>..</b>	<b>171,800</b>	<b>..</b>	<b>163,551</b>	<b>..</b>

(a) Excludes potatoes and onions.

(b) Incomplete; excludes New South Wales.

2. **Production of Canned and Dehydrated Vegetables.**—Total production of canned vegetables in 1957–58 amounted to 86,729,000 lb., which was considerably higher than pre-war production, and approximately 73 per cent. of the peak war-time production of 119,149,000 lb. recorded in 1944–45. The principal canned vegetables produced in 1957–58 were green peas 30,144,000 lb., green beans 9,384,000 lb., baked beans (including pork and beans) 17,098,000 lb., tomatoes 2,998,000 lb. and asparagus 7,810,000 lb.

The production of dehydrated vegetables, which was initiated by the Commonwealth Government during the 1939–45 War, rose to a maximum of 22,000,000 lb. in 1945–46, but in 1956–57 it was only approximately 691,000 lb.

3. **Imports and Exports of Vegetables.**—The quantity and value of oversea exports of pulse and fresh vegetables during 1957–58 were respectively:—Pulse, 8,938 tons, £517,110; onions, 4,562 tons, £134,517; potatoes, 7,410 tons, £227,475; other vegetables, 1,604 tons, £184,988. Imports of pulse amounted to 3,869 tons, valued at £286,525, whilst imports of fresh vegetables in total were 675 tons, valued at £168,244.

In 1957–58, exports of vegetables preserved in liquid consisted of:—Asparagus, 998,200 lb. (£163,673); Beans (including baked), 439,572 lb. (£23,062); Peas, 320,307 lb. (£25,886); Tomatoes, 356,798 lb. (£17,373); Other Vegetables, 387,873 lb. (£46,146).

4. **Consumption of Vegetables.**—Details of the estimated consumption of vegetables for a series of years ending with 1957–58 are shown in Chapter XXX.—Miscellaneous, of this Year Book.

### § 18. Tobacco.

1. **States, Area and Production.**—Tobacco has been grown in Australia for a considerable number of years. As early as the season 1888–89, the area of this crop amounted to 6,641 acres, of which 4,833 were in New South Wales, 1,685 in Victoria, and 123 in Queensland. Thereafter, the industry fluctuated for many years reaching a peak in 1932–33 when 26,272 acres were planted.

In 1957–58, the area planted was 13,270 acres which was 18 per cent. more than the average for the ten years ended 1938–39. Owing to improvement in average yields, however, the production of dried leaf in 1957–58 was 126 per cent. higher than the pre-war average.

In the following table, particulars of the area and production of tobacco are given by States for each of the seasons 1953-54 to 1957-58, together with averages for the ten-year periods ended 1938-39 and 1956-57:—

## TOBACCO : AREA AND PRODUCTION.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(a)
AREA (ACRES).							
Average, 1929-30 to 1938-39	1,274	6,237	2,865	292	502	89	11,259
1953-54.. .. .	501	2,246	4,065	..	1,434	..	8,246
1954-55.. .. .	635	2,471	5,135	..	1,418	..	9,661
1955-56.. .. .	893	2,876	6,301	..	1,235	..	11,306
1956-57.. .. .	1,031	2,935	7,029	..	1,176	..	12,172
Average, 1947-48 to 1956-57	546	1,753	4,231	..	1,082	..	7,612
1957-58.. .. .	1,193	3,252	7,493	..	1,266	..	13,204
PRODUCTION OF DRIED LEAF ('000 lb.).							
Average, 1929-30 to 1938-39	860	2,354	1,400	83	361	56	5,114
1953-54.. .. .	587	2,155	4,015	..	912	..	7,669
1954-55.. .. .	618	868	4,332	..	1,003	..	6,821
1955-56.. .. .	547	1,135	3,702	..	721	..	6,106
1956-57.. .. .	805	2,741	4,344	..	819	..	8,709
Average, 1947-48 to 1956-57	481	1,225	3,238	..	815	..	5,759
1957-58.. .. .	1,235	3,683	5,618	..	1,031	..	11,567

(a) Includes small amounts produced in Northern Territory from 1954-55 onwards.

2. The Tobacco Industry.—(i) *Marketing.* In the early days, purchase of the leaf at the farms was the usual practice but towards the end of the 1930's the auction system was introduced by arrangement between the growers' associations and the manufacturers.

On 9th May, 1941, the Australian Tobacco Board was constituted under the National Security (Australian Tobacco Leaf) Regulations for the purpose of facilitating and regulating the marketing of Australian grown tobacco leaf. All leaf was under the control of the Board, the growers being paid on the valuation as appraised by the Board. The Board ceased to function on 24th September, 1948, and subsequent crops have been marketed at open auction in the respective States. Queensland has had its own Tobacco Leaf Marketing Board since 1948 and leaf sold in that State has a reserved price, determined by the Board's appraiser. Growers in New South Wales voluntarily submit their leaf to the Queensland Board. Leaf from Victoria is sold at auction in Melbourne for the Victoria Tobacco Growers' Association. In Western Australia the leaf is sold in Perth for the Western Australian Tobacco Growers' Association (Inc.).

(ii) *Central Tobacco Advisory Committee.* The Australian Agricultural Council formed the Standing Advisory Committee on Tobacco during 1950. This Committee consisted of representatives of tobacco growers, tobacco manufacturers and the Commonwealth and State Governments. Its main functions were to review the industry and make recommendations on its problems.

The Committee was reconstituted by the Agricultural Council during 1952-53 and its terms of reference are as follows:—

“To report annually to the Agricultural Council, through the Standing Committee on Agriculture and also to the Commonwealth Minister for Customs and Excise, through the Chairman of the Council, on the following:—

- (i) The percentage of Australian tobacco which should be incorporated in locally manufactured tobacco under Customs regulations, having regard to the anticipated volume of Australian production of usable leaf available for absorption by the manufacturing industry;
- (ii) The progress of the industry during the year with particular reference to—
  - (a) marketing problems encountered,
  - (b) a review of prices being paid to farmers in relation to quality of leaf,
  - (c) such other problems as may be retarding the progressive development of the industry, such as the volume of importation of manufactured tobacco and cigarettes.”

(iii) *Industry Inquiries.* The tobacco industry has been the subject of a number of investigations during the past 30 years. The Tariff Board inquired into the industry in 1923, 1926, 1931 and 1940 and reports were issued in respect of the last three inquiries.

(iv) *Commonwealth Grants.* Details of the recommendations by the Tobacco Inquiry Committee and grants periodically approved by the Commonwealth Government up to 30th June, 1953, were given in Official Year Book No. 40, pages 895, 896 and in previous issues.

(v) *Research and Investigations.* The Commonwealth Scientific and Industrial Research Organization has been investigating many fundamental problems connected with tobacco culture. One of the major achievements of this organization was the development in the mid-1930's of a technique to control blue mould in the seed bed. Investigations are now being made into the control of this disease in the field. State Departments of Agriculture are also carrying out investigations over a wide range of problems, being concerned mainly with variety trials, irrigation, disease and pest control, crop rotation and cultural practices.

In 1955, the Central Tobacco Advisory Committee formulated a programme for increased research and advisory activities. The capital costs of establishing this programme are estimated at £168,000 of which the Commonwealth Government and tobacco manufacturers have each agreed to contribute half. It has been estimated that to maintain the programme, it will cost approximately £63,000 per annum, of which the Commonwealth Government is contributing £21,000, tobacco growers £14,000 and tobacco manufacturers £28,000 per annum. A Tobacco Industry Trust Account has been established to receive these contributions. This programme commenced in 1956.

During the first two years of the operation of the Trust Account, £342,529 was allocated to State and Commonwealth departments.

(vi) *War Service Land Settlement.* Tobacco growing under the War Service Land Settlement Scheme commenced in 1949 and is being carried out on 67 farms in Queensland. Each farm is designed to have a minimum of 40 acres of suitable land to permit of ten acres being cropped annually on a one in four rotation.

Due to technical difficulties in certain districts in Western Australia, tobacco growing under the War Service Land Settlement Scheme has been considerably curtailed.

(vii) *Tobacco Factories.* Manufacturers of Australian cigarettes and tobacco are granted a lower rate of duty on imported tobacco leaf, provided it is blended with a prescribed minimum percentage of Australian leaf. These percentages rose from 3 per cent. for cigarettes and 5 per cent. for tobacco in November, 1946, to 15½ per cent. and 16½ per cent. respectively from 1st July, 1958. The percentages to apply from 1st July, 1959, when most of the 1958 tobacco crop will be used in manufacture, are 22 per cent. and 23.5 per cent. respectively. In 1957-58, the quantity of cured leaf used in tobacco factories in Australia amounted to 48.8 million lb. of which 7.6 million lb. was of local origin. The balance was imported, chiefly from the United States of America.

3. *Oversea Trade.*—Imports of tobacco and manufactures thereof into Australia during 1957-58 were valued at £15.5 million, including 43.0 million lb. of unmanufactured tobacco valued at £14.6 million. Exports of tobacco and manufactures thereof during 1957-58 were valued at £704,116.

### § 19. Hops.

Hop-growing in Australia is practically confined to Tasmania and some of the cooler districts of Victoria, the total area for 1956-57 being 1,876 acres, of which 1,441 acres were in Tasmania, and 435 acres in Victoria. A small area was also under hops in Western Australia, but the details are not available for publication. The Tasmanian area, though still small, has increased during the present century, the total for 1901-2 being 599 acres. The cultivation of hops was much more extensive in Victoria some 60 years ago than at present, the area in 1883-84 being 1,758 acres.

The production of hops in Australia is insufficient to meet local requirements, and additional supplies are imported to meet the needs of the brewing industry. In the following table, details of the production, imports and exports of hops and the quantity of hops used in breweries are shown for each of the years 1953-54 to 1957-58 in comparison with the average for the five years ended 1938-39.

#### HOPS: PRODUCTION AND DISPOSAL, AUSTRALIA.

Year.	Production.		Imports.	Exports.	Net Available Supplies. (a)	Quantity used in Breweries.
	Quantity.	Gross Value.				
	Cwt.	£'000.				
Average, 1934-35 to 1938-39	20,576	173	1,020	78	21,518	18,992
1953-54	24,666	802	14,675	59	39,282	43,525
1954-55	34,075	1,106	10,311	..	44,386	42,976
1955-56	34,374	1,102	16,880	..	51,254	43,638
1956-57	25,230	857	3,074	..	28,978	40,250
1957-58	32,710	1,137	4,502	..	37,212	(b)

(a) Disregards movements in stocks.

(b) Not yet available.

The Tariff Board conducted an inquiry into the hop-growing industry and issued a report on 12th June, 1945.

## § 20. Flax.

1. **Flax for Fibre.**—During the 1914–18 and 1939–45 Wars, there was an acute shortage of flax fibre and the expansion of production was encouraged by the Commonwealth Government, the area sown reaching a maximum of more than 61,000 acres in 1944–45.

The growing of flax for fibre is now confined to the States of Victoria, South Australia and Western Australia. In Victoria and South Australia, production is directed and controlled by the Flax Commission which took over the Commonwealth flax undertakings from the Flax Production Committee on 1st November, 1954. In Western Australia, the industry is carried on by a Co-operative Company.

Following on the Tariff Board's Report on Flax Fibre dated 5th August, 1954, the Government introduced a bounty on flax fibre for a period of two years to permit the modernization of plant and machinery. The amount of the bounty is related to the difference between overseas prices and local production costs and it came into operation on 1st November, 1954. The Tariff Board conducted a further inquiry into flax fibre in 1956 and in its report dated 8th February, 1957, recommended the continuance of bounty payments for a further period of three years. The Government decided, however, in May 1957, that a complete examination should be made of the possible future of the industry, from the economic, defence and other viewpoints. It decided that bounty payments should continue until 31st October, 1957, while the enquiry was proceeding.

In November, 1957, the Government approved a three year extension of bounty assistance to flax producers and decided that the Commonwealth should withdraw from the field of flax fibre production by selling or closing the mills operated by the Flax Commission, as and when this was practicable.

One important factor which influenced the Government in making this decision was the view expressed by the defence authorities that the industry no longer has the same defence significance as it had when the Flax Commission was first established.

Details of the area under flax and the production of straw are given in the following table:—

## FLAX FOR FIBRE: AREA AND PRODUCTION.

Season.	Victoria.	S. Aust.	W. Aust.	Australia.
AREA (ACRES).				
Average, 1934–35 to 1938–39 .. ..	1,021	..	..	(a) 1,030
1953–54 .. .. .	9,550	3,040	3,105	15,695
1954–55 .. .. .	5,878	1,314	464	7,656
1955–56 .. .. .	2,550	526	1,594	4,670
1956–57 .. .. .	2,196	1,864	1,757	5,817
1957–58 .. .. .	5,550	1,410	1,002	7,962
PRODUCTION (TONS OF STRAW).				
Average, 1934–35 to 1938–39 .. ..	61	..	..	61
1953–54 .. .. .	12,984	4,647	4,470	22,101
1954–55 .. .. .	7,799	1,888	500	10,187
1955–56 .. .. .	4,637	1,150	1,875	7,662
1956–57 .. .. .	4,013	4,606	2,051	10,670
1957–58 .. .. .	9,923	3,077	1,246	14,246

(a) Includes nine acres of unproductive flax in Queensland.

2. **Flax for Linseed.**—Prior to 1948–49, the growing of flax for linseed oil had not been developed extensively in Australia. Since then however, action has been taken to develop this industry, the ultimate objective being the production of sufficient linseed to meet Australia's total oil requirements. Development of the industry proceeded rapidly until 1951–52 when the record total of 53,741 acres was sown. In 1952–53, there was a decline in the acreage and a further decline in 1953–54 when 6,343 acres only were sown. Since then an increase to £70 per ton, f.o.r. ports, in the guaranteed price notified to growers by the crushers early in each season has led to an increase in the area sown to 19,403 acres in 1954–55, 90,102 acres in 1956–57 and 96,465 acres in 1957–58.

The question of assistance to the industry was investigated by the Commonwealth Tariff Board in 1953 and their conclusions are contained in their Report on *Linseed and Linseed Products* dated 23rd October, 1953.

Details of the area and production of flax for linseed are shown in the following table for the seasons 1953-54 to 1957-58.

**FLAX FOR LINSEED: AREA AND PRODUCTION.**

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
AREA (ACRES).							
1953-54 .. ..	1,400	1,226	3,647	70	..	..	6,343
1954-55 .. ..	1,826	1,829	15,569	171	..	8	19,403
1955-56 .. ..	1,817	580	45,202	128	..	..	47,727
1956-57 .. ..	2,404	1,143	86,265	290	..	..	90,102
1957-58 .. ..	2,251	4,091	90,255	221	549	..	97,367
PRODUCTION (TONS OF LINSEED).							
1953-54 .. ..	256	202	359	5	..	..	822
1954-55 .. ..	355	358	4,705	28	..	2	5,448
1955-56 .. ..	400	94	12,738	15	..	..	13,247
1956-57 .. ..	622	306	17,644	76	..	..	18,648
1957-58 .. ..	36	1,149	7,279	49	68	..	8,581

**§ 21. Peanuts.**

The production in Australia of peanuts, or groundnuts, is mainly confined to Queensland, although small quantities are grown in New South Wales, Western Australia and the Northern Territory. Details of the area and production are given in the table below.

**PEANUTS: AREA AND PRODUCTION, AUSTRALIA.**

Season.	Area (Acres).					Production (Tons).				
	N.S.W.	Qld.	W.A.	N.T.	Aust.	N.S.W.	Qld.	W.A.	N.T.	Aust.
Average, 1929-30 to 1938-39 ..	29	8,320	100	(a)	8,449	(b) 11	3,715	24	(a)	3,750
1953-54 .. ..	1,525	36,617	(c)	(a)	d 38,142	718	17,866	(c)	(a)	d 18,584
1954-55 .. ..	769	37,971	(c)	780	d 39,520	346	14,001	(c)	135	d 14,482
1955-56 .. ..	414	31,493	(c)	544	d 32,451	174	8,633	(c)	40	d 8,847
1956-57 .. ..	419	25,017	(c)	208	d 25,644	234	8,676	(c)	17	d 8,927
1957-58 .. ..	686	34,739	(c)	156	d 35,581	401	18,326	(c)	15	d 18,742

(a) Not available.

(b) Average for five years.

(c) Not available for publication.

(d) Excludes Western Australia.

The gross value of the 1956-57 crop (excluding the small crop in Western Australia) was £962,000 which was approximately £74,000 more than in 1955-56.

Formerly, considerable quantities of peanut kernels were imported, chiefly from India, for the extraction of oil. These imports were suspended from 1946 to 1949, but have since been resumed on an increasing scale. Total supplies available for consumption in Australia in 1957-58, 16,485 tons (shell equivalent), consisted of 8,927 tons grown locally in the 1956-57 season and 7,558 tons imported.

**§ 22. Cotton.**

1. General.—The production of cotton in Australia is restricted to Queensland, where cultivation began in 1860. Details of areas sown for years prior to 1930 and of Government financial assistance to growers up to 1940 appear in Official Year Book No. 39 and earlier issues.

Australia produces only a small part of its requirements of raw cotton, the balance being obtained in 1956-57 chiefly from the United States of America, Mexico, Pakistan, Brazil and India. Efforts have been directed towards increasing production by an extension of area, the introduction of irrigation methods, and payment of bounties, but so far have not met with much success. Production increased very considerably during the early years of the 1939-45 War, reaching a peak of 17,550,000 lb. unginned cotton in 1939-40, but has since fallen away. The expansion of the industries connected with the spinning and weaving of cotton is referred to in Chapter VI.—Manufacturing Industry.

The Raw Cotton Bounty Act 1940 provided an extension, until 31st December, 1946, of assistance previously granted by way of bounty. The Act was amended in August, 1946, to provide a guaranteed net average return to cotton-growers of 15d. per lb. of raw cotton for five years from 1st January, 1947. It was superseded by the Cotton Bounty Act 1951, which guaranteed a net average return of 9½d per lb. of seed cotton for five years from 1st January, 1951. The 1951 Act was amended in 1952 to provide for a guaranteed return of 14d. per lb. of seed cotton for the 1953 crop, and for variation by regulation of the guaranteed return, in succeeding seasons, with a minimum of 9½d. per lb. The Act, as amended in 1952 and 1957, was extended in 1958 to cover production up to 31st December, 1963. The guaranteed return has remained at 14d. per lb. of seed cotton since the 1953 season and the Government has announced that the guaranteed return for 1957 and 1958 seasons will not be less than 14d. per lb.

2. **Area and Production.**—The area under cultivation and the production in Queensland for the years 1953 to 1957 are shown hereunder together with the average for the period of ten years ended 1939. Details of the production of ginned cotton are derived from published statistics of the Queensland Cotton Marketing Board.

**COTTON: AREA AND PRODUCTION IN QUEENSLAND.**

Season ended December—	Area Sown.	Production of Cotton.				Average Yield per Acre Sown.	
		Unginned.		Ginned.	Ginned— Equivalent in Bales. (a)	Unginned.	Ginned.
		Quantity.	Gross Value.				
		Acres.	'000 lb.	£'000.	'000 lb.	Bales.	lb.
Average, 1930 to 1939	58,436	16,617	291	5,564	11,181	284	95
1953 .. ..	8,965	5,132	316	2,068	4,229	572	231
1954 .. ..	8,377	3,597	208	1,365	2,819	429	163
1955 .. ..	13,290	5,359	307	2,164	4,386	403	163
1956 .. ..	11,338	3,809	224	1,460	3,046	336	129
1957 .. ..	10,364	3,390	213	1,341	2,845	327	129

(a) Bales of approximately 500 lb.

3. **Consumption of Raw Cotton.**—The following table shows the expansion which has taken place in the consumption of raw cotton in Australia since 1938–39.

**RAW COTTON: PRODUCTION, IMPORTS AND CONSUMPTION, AUSTRALIA.**  
(\*000 lb.)

Year.	Production.	Imports.	Total.	Consumption of Raw Cotton in Spinning.
Average, 1936–37 to 1938–39 ..	5,180	9,882	15,062	12,523
1952–53 .. ..	755	24,796	25,551	31,128
1953–54 .. ..	2,068	44,203	46,271	43,994
1954–55 .. ..	1,365	43,218	44,583	47,098
1955–56 .. ..	2,164	37,614	39,778	45,262
1956–57 .. ..	1,460	47,805	49,265	46,699

**§ 23. Financial Assistance to Primary Producers.**

NOTE.—See also Chapter XXI.—Public Finance, page 796.

Direct financial assistance to primary producers by the Commonwealth Government takes the form of bounties, subsidies and other financial assistance. Brief details of some of the more important payments are given below:—

(i) *Cotton Bounty.* The Cotton Bounty Act provides for payment of a bounty on seed cotton delivered by growers to processors. The present rate of bounty is designed to give growers an average return of 14d. per lb. The total payment in 1957–58 was £64,702 in respect of 3,474,828 lb. of cotton. In 1956–57, the total payment was £150,665 in respect of 6,300,685 lb.

(ii) *Dairy Products Bounty.* Under the provisions of the Dairy Industry Act 1952, a subsidy was paid to dairymen to ensure them a return equal to the average cost of production for a specified quantity equal to local consumption plus twenty per cent. The Dairy Industry Act 1957 provided for continuation of the scheme for a further five years. A new feature, however, was that any subsidy made available under the scheme would be determined before the commencement of each season and would be on the basis of a fixed amount in any dairying year. In 1957-58, total payments amounting to £13,500,000, the same as in 1956-57.

(iii) *Flax Fibre Bounty.* From 1954 to 1958, a bounty was paid on scutched flax fibre produced from flax grown in Australia. In 1957, the Act was amended to provide for the calculation of the bounty payable on the basis of fibre sold, in lieu of fibre produced. In 1957-58, payments amounted to £62,348. Expenditure in 1956-57 was £49,823.

Other forms of financial assistance to primary producers include payments for Cattle Tick Control, the Dairy Industry Extension Grant, Flood, Drought and Bush Fire Relief, Food Production, Expansion of Agricultural Advisory Services and Assistance to the Tobacco Industry.

## § 24. Fertilizers.

1. *General.*—In the early days of settlement in Australia, scientific cultivation was little understood. It was common, as in other new countries, for the land to be cropped continuously to a degree of exhaustion. This practice is very much less in evidence now than in the early days of Australian agricultural development. Under the guidance of the State Departments of Agriculture and the relevant Commonwealth authorities, such as the Bureau of Agricultural Economics and the Commonwealth Scientific and Industrial Research Organisation, scientific farming is now much more widely practised. The importance of fallowing, crop rotation, and the application of suitable fertilizers in adequate quantities is now appreciated by farmers. The introduction of the modern seed-drill, acting also as a fertilizer-distributor, has greatly facilitated the use of artificial manures and much land formerly regarded as useless for cultivation has now been made productive. During the last few years, the application of fertilizers from aircraft, particularly to pastures, has become a feature of modern farm technique, and has enabled the artificial fertilization of some areas which would not be readily accessible to ground machinery. For further details, see § 25 below.

In order to protect the users of artificial fertilizers, legislation has been passed in each of the States regulating the sale and prohibiting the adulteration of fertilizers. A list of these Acts and their main features are given in Official Year Book No. 12, page 378.

2. *Imports and Exports.*—The Australian output of prepared fertilizers is derived chiefly from imported rock phosphate and is sufficient for local requirements.

The chief sources of Australia's supplies of rock phosphate are Nauru, Christmas Island (Indian Ocean) and the Gilbert and Ellice Islands. Sodium nitrate is obtained chiefly from Chile.

The imports of artificial fertilizers during the five years ended 1957-58, compared with average imports for the period 1934-35 to 1938-39, are shown in the following table:—

ARTIFICIAL FERTILIZERS: IMPORTS INTO AUSTRALIA.

Fertilizer.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Ammonium Sulphate tons	26,090	11,187	35,056	9,466	28,251	20,945
	£'000	215	242	764	228	624
Potash Salts tons	10,641	22,234	27,403	39,099	38,246	53,570
	£'000	82	397	489	652	638
Rock Phosphate tons	635,097	1,143,330	1,086,884	1,418,527	1,321,607	1,273,766
	£'000	776	2,432	2,166	2,828	2,804
Sodium Nitrate tons	7,199	6,948	11,714	14,102	11,219	14,430
	£'000	63	183	250	323	252
Other .. tons	3,430	6,935	399	506	785	4,619
	£'000	8	151	14	16	20
Total .. tons	682,457	1,190,634	1,161,456	1,481,700	1,400,108	1,367,330
	£'000	1,144	3,405	3,683	4,047	4,338

Exports of fertilizers (practically all of which are manufactured locally) amounted to 2,646 tons valued at £57,701 in 1957-58 compared with 16,622 tons valued at £380,000 in 1956-57 and 4,826 tons valued at £34,000 for the average of the five years ended 1938-39.

3. **Quantities Used Locally.**—Information regarding the area treated with artificial fertilizers and the quantity of artificial fertilizers (superphosphate, bonedust, nitrates, etc.) used in each State during the 1957-58 season is given in the following table. Details of the area fertilized with natural manure (stableyard, etc.) are no longer collected.

#### AREA FERTILIZED AND QUANTITY OF ARTIFICIAL FERTILIZERS USED, 1957-58.

State or Territory.	Area Fertilized ('000 Acres).			Fertilizers Used (Tons).		
	Crops.	Pasture Lands.	Total.	Crops.	Pasture Lands.	Total.
New South Wales .. ..	1,994	4,645	6,639	91,004	246,861	337,865
Victoria .. ..	3,690	9,684	13,374	190,966	548,356	739,322
Queensland .. ..	487	18	505	113,070	1,611	114,681
South Australia .. ..	3,463	4,005	7,468	182,248	236,291	418,539
Western Australia .. ..	5,492	5,451	10,943	275,743	263,449	539,192
Tasmania .. ..	151	999	1,150	24,400	74,642	99,042
Northern Territory .. ..	..	..	..	156	..	156
Australian Capital Territory .. ..	3	52	55	249	2,940	3,189
<b>Total</b> .. ..	<b>15,280</b>	<b>24,854</b>	<b>40,134</b>	<b>877,836</b>	<b>1,374,150</b>	<b>2,251,986</b>

Particulars of the quantity of artificial fertilizers used in each State and Territory during each of the seasons 1953-54 to 1957-58, compared with the average for the five years ended 1938-39, are shown in the next table. These details include the quantity used for the topdressing of pasture lands.

#### QUANTITY OF ARTIFICIAL FERTILIZERS USED. (Tons.)

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Total.
Average, 1934-35 to 1938-39 ..	148,277	305,969	50,651	200,566	230,713	30,272	(a)	276	966,724
1953-54 ..	251,440	592,403	96,358	325,085	405,012	71,015	(a)	2,304	1,743,617
1954-55 ..	273,548	635,290	91,700	350,351	450,823	75,748	54	2,672	1,880,186
1955-56 ..	307,608	653,591	99,075	380,783	468,108	82,967	67	2,982	1,995,181
1956-57 ..	292,261	644,830	103,915	389,952	481,981	89,598	54	2,805	2,005,396
1957-58 ..	337,865	739,322	114,681	418,539	539,192	99,042	156	3,189	2,251,986

(a) Not available.

4. **Local Production.**—Complete information regarding local production of fertilizers is not available. The number of firms engaged in the manufacture of chemical fertilizers in Australia for the year 1956-57 was 52, made up as follows:—New South Wales, 15; Victoria, 8; Queensland, 8; South Australia, 8; Western Australia, 6; and Tasmania, 7. The production of superphosphate in Australia during 1957-58 amounted to 2,219,000 tons.

#### § 25. Aerial Agriculture.

During recent years, aircraft have been used in agriculture for topdressing and seeding (principally of pastures) and for spraying and dusting of crops and pastures. During the year ended 31st March, 1958, the total area treated by aircraft was 2,031,715 acres—1,552,502 acres were topdressed and/or seeded, 459,213 acres were sprayed or dusted with insecticides, fungicides or herbicides and 20,000 acres were treated with poison baits for dingoes. For the previous year (the first year for which data are available), the total area treated was 1,465,959 acres. The following table shows details of area treated and materials used for each State for the year ended 31st March, 1958. The information was collected by the Department of Civil Aviation.

**AERIAL AGRICULTURE: OPERATIONS DURING 1957-58.**

Item.	Unit.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Total (a)
<i>Topdressing and Seeding—</i>								
Area treated with—								
Superphosphate	Acres.	959,955	252,311	493	55,182	45,472	70,805	1,384,218
Seed .. ..	..	141,926	35,500	71,458	4,917	26,047	7,625	287,473
Other .. ..	..	48,520	..	503	..	..	..	49,023
<i>Total (b)</i>	..	<i>1,049,076</i>	<i>253,596</i>	<i>72,454</i>	<i>60,099</i>	<i>46,472</i>	<i>70,805</i>	<i>1,552,502</i>
<i>Materials used—</i>								
Superphosphate	Tons.	51,854	17,065	25	3,239	2,309	4,673	79,165
Seed .. ..	lbs.	190,387	7,240	129,425	50,090	57,072	13,600	447,814
<i>Spraying and Dusting—</i>								
Area treated with—								
Insecticides ..	Acres.	5,145	51,813	93,660	23,821	66,832	1,150	242,421
Fungicides ..	..	..	2,200	2,290	1,797	..	..	6,287
Herbicides ..	..	6,657	32,713	17,006	5,954	150,844	100	213,274
<i>Total(b)</i>	..	<i>11,802</i>	<i>85,423</i>	<i>111,934</i>	<i>31,572</i>	<i>217,232</i>	<i>1,250</i>	<i>459,213</i>
<b>Total Area Treated ..</b>	<b>..</b>	<b>1,080,878 (c)</b>	<b>339,019</b>	<b>184,388</b>	<b>91,671</b>	<b>263,704</b>	<b>72,055</b>	<b>2,031,715 (c)</b>

(a) Includes Australian Capital Territory. in one operation are counted once only.

(b) Areas treated with more than one type of material in one operation are counted once only.

(c) Includes 20,000 acres treated with poison baits for dingoes.

**§ 26. Ensilage.**

1. Government Assistance.—The several State Governments devote a considerable amount of attention to the education of the farming community with regard to the value of ensilage. Monetary aid is afforded in the erection of silos, and expert advice is supplied in connexion with the design of the silos and the cutting and packing of the ensilage.

2. Quantity Made and Stocks Held on Farms.—Information regarding production and farm stocks of ensilage for the years ended 31st March, 1956, 1957 and 1958 are given in the following table.

**ENSILAGE: PRODUCTION AND FARM STOCKS.  
(Tons.)**

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
<i>Production during—</i>								
1955-56 season ..	86,125	127,878	36,191	35,457	12,312	47,282	395	345,640
1956-57 .. ..	106,521	187,220	46,255	50,900	12,644	60,454	210	464,204
1957-58 .. ..	91,486	194,850	41,367	23,230	27,988	52,125	58	431,104
<i>Farm Stocks, as at—</i>								
31st March, 1956 ..	101,179	(a)	43,155	26,664	8,918	42,863	415	(a)
.. .. 1957 ..	135,302	(a)	74,705	41,338	8,466	67,153	580	(a)
.. .. 1958 ..	134,895	(a)	77,972	20,605	16,501	52,263	205	(a)

(a) Not available.

The drought of 1902-3 drew increased attention to the value of stocks of ensilage, and in the following seasons there was an increase both in the number of holdings on which ensilage was made and in the quantity produced. The accumulated stocks proved of great value during the 1914 drought, though far less than would have been the case if more attention had been paid to production during the previous years when there was a surplus of green fodder. The quantities of ensilage made since 1914 have fluctuated

considerably, but the output increased up to 1939-40 in which year the production was 303,495 tons. During subsequent seasons, output declined to the extremely low level of 94,744 tons during the drought year 1944-45, rising to 180,622 tons in 1947-48 but decreasing again in succeeding years to 110,474 tons in 1951-52. Since then production has increased substantially. In 1956-57, a record quantity of 464,184 tons was made and in 1957-58 production amounted to 431,104 tons.

### § 27. Agricultural Colleges and Experimental Farms.

Agricultural colleges have been established in all States except Tasmania. The primary function of these colleges is the training of students in the various phases of agricultural work and livestock husbandry. Students are required to undertake a considerable amount of practical work in addition to lectures and theory. A secondary function of the colleges is agricultural research and experimentation. To a lesser degree, they carry out extension work in the form of public field days. Upon graduation, students receive diplomas in agriculture, dairying, etc., according to the course undertaken.

Experimental farms have been set up by State Departments of Agriculture in all States. They are primarily concerned with agricultural research and experimentation, each farm concentrating on problems specific to the district in which it is located. The results of the work undertaken are passed on to farmers at field days, which are held at regular intervals, through publication in various agricultural or scientific journals and through the agricultural extension officers of the State Departments of Agriculture.

The Commonwealth Scientific and Industrial Research Organization has field stations scattered throughout Australia, and sometimes undertakes research jointly with the appropriate State authorities. It also has a number of regional laboratories throughout the country. These laboratories conduct research into agronomic problems as they occur in each particular region. The most recently established laboratory which is concerned with all aspects of the culture and production of tobacco is at Mareeba, Northern Queensland. The State Departments of Agriculture study problems of particular significance within their own boundaries. The universities also carry out valuable research work on their own experimental farms.

### § 28. Tractors on Rural Holdings.

The growth of mechanization in agriculture is indicated by the increase in the number of tractors on rural holdings from 41,943 in 1939 to 224,681 in 1958.

The table below sets out the total number of tractors on rural holdings in 1939, and the number of wheeled and crawler type tractors for the five years ended 1958.

#### TRACTORS ON RURAL HOLDINGS.

March—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
<b>WHEELED TYPE TRACTORS.</b>									
1954 .. ..	41,195	41,953	32,535	18,228	16,577	5,111	(a)	163	155,762
1955 .. ..	45,619	45,824	35,024	20,074	17,832	5,699	(a)	172	170,244
1956 .. ..	50,005	49,584	37,443	21,155	18,537	6,272	70	193	183,259
1957 .. ..	52,477	52,275	39,627	22,826	19,352	6,967	83	191	193,798
1958 .. ..	55,648	55,090	41,072	23,952	20,086	7,395	82	188	203,513
<b>CRAWLER OR TRACK TYPE TRACTORS.</b>									
1954 .. ..	3,221	1,214	4,547	2,614	3,093	547	(a)	7	15,243
1955 .. ..	3,479	1,430	4,945	3,036	3,334	660	(a)	9	16,893
1956 .. ..	4,001	1,645	5,313	3,190	3,654	745	32	10	18,590
1957 .. ..	4,232	1,621	5,180	3,186	3,556	843	31	8	18,657
1958 .. ..	4,605	1,825	6,506	3,336	3,877	974	38	7	21,168
<b>TOTAL TRACTORS.</b>									
1939(b) ..	12,926	8,802	8,541	5,969	5,680	(a)	(a)	25	(c) 41,943
1954 .. ..	44,416	43,167	37,082	20,842	19,670	5,658	(a)	170	171,005
1955 .. ..	49,098	47,254	39,969	23,110	21,166	6,359	(a)	181	187,137
1956 .. ..	54,006	51,229	42,756	24,345	22,191	7,017	102	203	201,849
1957 .. ..	56,709	53,896	44,807	26,012	22,908	7,810	114	199	212,455
1958 .. ..	60,253	56,915	47,578	27,288	23,963	8,369	120	195	224,681

(a) Not available.

(b) At commencement of year.

(c) Excludes Tasmania.

### § 29. Number and Area of Rural Holdings and Employment Thereon.

NOTE.—In New South Wales, in 1955–56, the lists of rural holdings used in the collection of agricultural and pastoral statistics were reconciled with lists of ratable land of one acre or more in extent recorded by country shires for rating purposes. This reconciliation led to the addition of a number of holdings to the annual collection.

The only items of agricultural and pastoral statistics which were materially affected by the inclusion of the additional land holdings were:—number of holdings, area of holdings, persons engaged on rural holdings and wages and salaries paid. To permit continuity of comparison of the relevant statistics, the effects of the additions to the collection were set out in detail in Official Year Book No. 44, pages 911–912.

1. **Number and Area.**—A holding in Australia has been defined by statisticians on a more or less uniform basis and discrepancies which exist are not of sufficient importance to vitiate comparisons. For the purpose of these statistics, a holding may be defined as land of one acre or more in extent, used in the production of agricultural produce, the raising of livestock or the products of livestock.

There are considerable fluctuations from time to time in the numbers of very small holdings and it is very difficult to determine in some cases whether or not they are rural holdings within the definition.

In addition, in the very dry parts, such as the far west of New South Wales and Queensland and the remoter parts of South Australia and Western Australia, there are large areas of marginal lands sporadically occupied under short-term lease or other arrangement and the areas so occupied tend to fluctuate with the seasons. Similarly, there are rugged areas in the mountain country of some states which are also occasionally occupied.

The following table shows the recorded number and area of the holdings in each State for the seasons 1938–39 and 1953–54 to 1957–58.

#### RURAL HOLDINGS : NUMBER AND AREA.

Season	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.(a)
NUMBER OF RURAL HOLDINGS.									
1938–39 ..	75,365	72,452	41,503	31,280	21,052	11,680	(b)	204	253,536
1953–54 ..	73,371	69,392	42,850	29,220	20,132	11,818	(b)	213	246,996
1954–55 ..	73,759	69,551	43,284	28,092	20,876	11,743	(b)	212	247,517
1955–56 ..	73,071	69,528	43,459	28,585	21,323	11,647	229	222	248,064
	(c)77,855								c 252,848
1956–57 ..	77,812	69,509	43,292	27,936	21,385	11,538	230	223	251,925
1957–58 ..	78,120	69,590	43,457	27,971	21,593	11,389	230	225	252,575

#### TOTAL AREA OF RURAL HOLDINGS. (‘000 ACRES.)

1938–39 ..	174,660	40,791	317,782	144,682	211,720	6,778	(b)	371	896,784
1953–54 ..	168,996	37,546	361,520	150,314	221,805	6,511	(b)	391	947,083
1954–55 ..	169,444	37,814	362,200	149,379	228,883	6,604	(b)	390	954,714
1955–56 ..	169,124	37,857	367,464	149,965	229,734	6,628	160,153	389	1,121,314
	c 172,255								(c) 1,124,445
1956–57 ..	172,411	37,659	368,689	149,932	232,689	6,508	168,447	390	1,136,725
1957–58 ..	173,278	37,822	368,833	152,045	236,667	6,547	167,210	392	1,142,794

(a) Excludes Northern Territory prior to 1955–56.  
See NOTE at beginning of § 29.

(b) Not available.

(c) New series.

2. **Special Tabulation Relating to Rural Holdings.**—(i) *Classification by Size of Holding.* Some of the information obtained from the 1955–56 Agricultural and Pastoral Census was classified by size of rural holding, and the results of these tabulations are shown in detail in *Primary Industries Part I—Rural Industries*, Bulletin No. 51, and in summarized form in Official Year Book No. 44, page 913.

(ii) *Classification by Type.* An experimental classification of holdings by type was carried out for New South Wales for 1955–56 in conjunction with the classification by size referred to above. An outline of the methods used and the results obtained were shown on page 914 of Official Year Book No. 44. This was the first attempt at a detailed classification of this kind in Australia although a very simple classification into the three categories—agricultural, pastoral or dairying (on the basis of main activity)—had been performed in some earlier years. It is probable that the methods used in the 1955–56 experimental classification will serve as the basis for an Australia-wide classification in later years.

3. **Employment on Rural Holdings.**—The following table shows, for each State of Australia, the recorded number of persons working on rural holdings as at 31st March, 1958. Additional particulars relating to the number of males employed in agriculture are available up to 1941–42 in Official Year Book No. 36, page 852, and previous issues. Similar details for later years are not available.

**PERSONS ENGAGED ON RURAL HOLDINGS AT 31st MARCH, 1958.**

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.(a)	A.C.T.	Aust.
<b>Permanent—</b>									
Owners, Lessees or Share-farmers									
Males	72,088	69,848	45,554	24,839	20,087	8,524	155	152	241,247
Females	1,062	4,937	10,703	1,718	226	376	29	6	19,057
Relatives of Owner, Lessee or Share-farmer over 14 years of age, not receiving wages or salary									
Males	7,802	5,348	4,289	2,406	1,530	130	15	15	21,535
Females	5,761	1,440	5,664	472	449	29	17	13	13,845
Employees, including Managers and Relatives working for wages or salary									
Males	31,074	18,019	19,971	7,950	8,936	4,694	529	135	91,308
Females	957	1,504	3,502	470	156	206	51	15	6,861
<b>Total Permanent—</b>									
Males	110,964	93,215	69,814	35,195	30,553	13,348	699	302	354,090
Females	7,780	7,881	19,869	2,660	831	611	97	34	39,763
<b>Persons</b>	<b>118,744</b>	<b>101,096</b>	<b>89,683</b>	<b>37,855</b>	<b>31,384</b>	<b>13,959</b>	<b>796</b>	<b>336</b>	<b>393,853</b>
<b>Temporary—</b>									
Males	26,211	19,012	19,112	16,160	5,037	5,986	1,572	52	93,142
Females	2,082	1,843	1,439	3,923	332	2,870	491	6	12,986
<b>Persons</b>	<b>28,293</b>	<b>20,855</b>	<b>20,551</b>	<b>20,083</b>	<b>5,369</b>	<b>8,856</b>	<b>2,063</b>	<b>58</b>	<b>106,128</b>
<b>Total Persons</b> ..	<b>147,037</b>	<b>121,951</b>	<b>110,234</b>	<b>57,938</b>	<b>36,753</b>	<b>22,815</b>	<b>2,859</b>	<b>394</b>	<b>499,981</b>

(a) 1,426 male and 488 female full-blood aboriginals employed are included as temporary employees.

The next table shows for Australia as a whole the number of persons working full-time on rural holdings as at 31st March of the five years 1954 to 1958.

## PERSONS ENGAGED ON RURAL HOLDINGS, AUSTRALIA.

Particulars.	As at 31st March—				
	1954.(a)	1955(a).	1956.	1957.	1958.
<b>Permanent—</b>					
<b>Males—</b>					
Owners, Lessees or Share-farmers ..	241,149	240,879	245,621	244,111	241,247
Relatives of Owner, Lessee or Share-farmer over 14 years of age, not receiving wages or salary ..	22,736	23,529	21,232	21,734	21,535
Employees, including managers and relatives working for wages or salary ..	93,748	91,479	89,334	90,599	91,308
Total, Males .. ..	357,633	355,887	356,187	356,444	354,090
" Females .. ..	49,782	46,656	42,104	41,373	39,763
<b>Total Permanent</b> .. ..	<b>407,415</b>	<b>402,543</b>	<b>398,291</b>	<b>397,817</b>	<b>393,853</b>
<b>Temporary—</b>					
Total, Males .. ..	86,644	87,400	84,607	86,267	93,142
" Females .. ..	8,365	9,238	9,638	11,324	12,986
<b>Total Temporary</b> .. ..	<b>95,009</b>	<b>96,638</b>	<b>94,245</b>	<b>97,591</b>	<b>106,128</b>
<b>Grand Total</b> .. ..	<b>502,424</b>	<b>499,181</b>	<b>492,536</b>	<b>495,408</b>	<b>499,981</b>

(a) Excludes Northern Territory.

4. Salaries and Wages Paid to Employees on Rural Holdings.—Particulars of salaries and wages paid to employees (including amounts paid to contractors) working full-time on rural holdings have been collected uniformly in all States from 1949–50. Details are set out below for each State for the year 1957–58, and for Australia as a whole for the years 1953–54 to 1957–58.

**RURAL HOLDINGS: SALARIES AND WAGES(a) PAID TO EMPLOYEES,  
1957-58.  
(£'000.)**

Particulars.	N.S.W. (b)	Vic.	Q'ld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Permanent—Males ..	20,899	14,185	13,770	5,263	5,770	3,001	373	136	63,397
Females ..	317	779	1,363	182	50	68	28	6	2,793
Temporary(c)—Males ..	17,295	9,793	20,162	4,826	5,670	1,841	297	98	59,982
Females ..	382	382	261	273	49	252	56	1	1,656
<b>Total</b> .. ..	<b>38,893</b>	<b>25,139</b>	<b>35,556</b>	<b>10,544</b>	<b>11,539</b>	<b>5,162</b>	<b>754</b>	<b>241</b>	<b>127,828</b>

(a) Including value of keep.  
paid to contractors.

(b) See Note at beginning of § 29.

(c) Includes amounts

**RURAL HOLDINGS: SALARIES AND WAGES(a) PAID TO EMPLOYEES,  
AUSTRALIA.  
(£'000.)**

Particulars.	1953–54.(b)	1954–55.(b)	1955–56.	1956–57.	1957–58.
Permanent—Males ..	52,240	53,951	55,752	58,707	63,397
Females ..	2,406	2,468	2,456	2,456	2,793
Temporary(c)—Males ..	51,282	53,855	53,200	54,431	59,982
Females ..	1,190	1,323	1,476	1,498	1,656
<b>Total</b> .. ..	<b>107,118</b>	<b>111,597</b>	<b>112,884</b>	<b>117,092</b>	<b>127,828</b>

(a) Including value of keep.  
to contractors.

(b) Excludes Northern Territory.

(c) Includes amounts paid

5. **Persons (of all ages) Residing Permanently on Holdings.**—Particulars of persons (of all ages) residing permanently on rural holdings have been collected by all States at the annual Agricultural and Pastoral Census each year since 1954. Details for each State as at 31st March, 1958, and for Australia as a whole for the years 1954–58 are shown below.

**RURAL HOLDINGS : PERSONS (OF ALL AGES) RESIDING PERMANENTLY ON HOLDINGS AT 31st MARCH, 1958.**

Particulars.	N.S.W.	Vic.	Q'ld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Males ..	172,765	143,607	108,221	58,061	47,874	28,234	904	530	560,196
Females ..	147,736	125,706	85,752	50,901	38,496	24,945	347	450	474,333
<b>Total ..</b>	<b>320,501</b>	<b>269,313</b>	<b>193,973</b>	<b>108,962</b>	<b>86,370</b>	<b>53,179</b>	<b>1,251</b>	<b>980</b>	<b>1,034,529</b>

**RURAL HOLDINGS : PERSONS (OF ALL AGES) RESIDING PERMANENTLY ON HOLDINGS, AUSTRALIA.**

Particulars.	As at 31st March—				
	1954.	1955.	1956.	1957.	1958.
Males .. ..	543,740	549,734	557,274	563,894	560,196
Females .. ..	453,503	462,163	469,805	475,587	474,333
<b>Total .. ..</b>	<b>997,243</b>	<b>1,011,897</b>	<b>1,027,079</b>	<b>1,039,481</b>	<b>1,034,529</b>

## CHAPTER XXIII.

## PASTORAL PRODUCTION.

NOTE.—Except where otherwise indicated, values of Australian oversea trade shown throughout this chapter are expressed as f.o.b., Australian currency, port of shipment.

## § 1. Initiation and Growth of the Pastoral Industry.

1. **Livestock Numbers.**—A detailed account of the various enumerations of livestock in Australia made prior to 1860 was given in previous issues of the Year Book. Since 1860, annual enumerations have been made, based, with few exceptions, on actual collections made through the agency of the State Police or by post. Particulars concerning the numbers of each of the principal kinds of livestock in Australia at decennial intervals from 1860 to 1950, and from 1954 onwards in single years, are given in the following table, and are shown continuously on the graph on page 939.

LIVESTOCK : AUSTRALIA.  
(‘000.)

Year.	Horses.	Cattle.	Sheep.	Pigs.	Year.	Horses.	Cattle.	Sheep.	Pigs.
1860 ..	432	3,958	20,135	351	1940 ..	1,699	13,080	119,305	1,455
1870 ..	717	4,276	41,594	543	1950 ..	1,057	14,640	112,891	1,123
1880 ..	1,069	7,527	62,184	816	1954 ..	850	15,601	126,944	1,197
1890 ..	1,522	10,300	97,881	891	1955 ..	803	15,836	130,849	1,297
1900 ..	1,610	8,640	70,603	950	1956 ..	770	16,457	139,124	1,166
1910 ..	2,166	11,745	98,066	1,026	1957 ..	737	17,257	149,802	1,325
1920 ..	2,416	13,500	81,796	764	1958 ..	694	16,892	149,315	1,423
1930 ..	1,793	11,721	110,568	1,072					

While livestock numbers (particularly sheep) have increased substantially since 1860, marked fluctuations have taken place during the period, mainly on account of droughts which have from time to time left their impress on the pastoral history of Australia. These occurred in 1868, 1877, 1883–4, 1892, 1893, 1895, 1901–2, 1912, 1914, 1918, 1919, 1922–23, 1925–26, 1927–28, 1929–30, 1940–41 and 1944–45 to 1946–47.

The years in which the numbers of livestock attained their maxima are as follows:—Horses, 1918 (2,527,000); cattle, 1957 (17,257,000); sheep, 1957 (149,802,000); and pigs, 1941 (1,797,000).

The distribution throughout Australia of beef cattle, dairy cattle, sheep and pigs as at 31st March, 1955, was shown in the maps on pages 909–12 of Official Year Book No. 43.

The numbers of horses, beef cattle and sheep in each State and Territory are shown later in this chapter; similar information for dairy cattle and pigs appears in Chapter XXIV.—Farmyard, Dairy and Bee Products.

2. **Minor Classes of Livestock.**—Statistics of the minor classes of livestock (goats, camels, mules, donkeys, etc.) have not been collected in recent years. The last year in which all States, other than Victoria, collected this information was 1941, when total numbers were as follows:—Goats, 80,366; camels, 2,267; and mules and donkeys, 10,881. Of these, goats were most numerous in Queensland, and camels, mules and donkeys in Western Australia. Further details have been published in earlier issues of the Official Year Book.

3. **Carrying Capacity of Pastoral Holdings.**—The carrying capacity of pastoral holdings has been increased in recent years, due in some measure to the succession of good seasons experienced between 1946 and 1957. Other important factors contributing to the progressive increase over this period have been the reduction of rabbit infestation by the introduction of myxomatosis, and increased attention to pasture improvement. In the 1957–58 season, prevailing dry conditions were responsible for a slight decline in cattle and sheep numbers.

Since myxomatosis was first introduced in 1950, there has been a dramatic increase in the spread of the disease over much of Australia and in many areas the rabbit population is at the lowest level for many years.

Statistics of the area under sown grasses and clovers which have been collected on a uniform basis in all States since 1952–53 reveal that the area sown has been considerably increased. In 1957–58, the area under sown grasses and clovers (excluding native grasses)

totalled 33.7 million acres, an increase of 1.2 million acres (4 per cent.) over 1956-57 and 12.6 million acres (60 per cent.) over 1952-53. In recent years, the sowing and top-dressing of pastures has been facilitated by the increasing use of aircraft in these operations, an area of 1.6 million acres being sown and/or top-dressed in the year ended March, 1958.

4. *Value of Pastoral Production.*—(i) *Gross, Local and Net Values, 1956-57 and 1957-58.* Values of pastoral production for each State are shown for 1956-57 and 1957-58 in the following table. Further details of the source of the information and an explanation of the terms used in this compilation will be found in Chapter XXX.—Miscellaneous. Maintenance costs have not been computed in all States and depreciation has not been deducted; consequently the net values are inflated to the extent of these costs.

## GROSS, LOCAL AND NET VALUES OF PASTORAL PRODUCTION.

(£'000.)

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Farm.	Farm Costs.		Net Value of Production. (a)
				Seed used, and Fodder for Farm Stock.	Value of other Materials used in Process of Production.	
1956-57.						
New South Wales	258,180	15,934	242,246	6,485	(b) 4,087	231,674
Victoria .. ..	149,880	11,918	137,962	3,207	4,872	129,883
Queensland .. .	126,588	8,649	117,939	3,668	1,705	112,566
South Australia ..	69,059	3,854	65,205	880	2,232	62,093
Western Australia	56,442	3,139	53,303	2,386	3,574	47,343
Tasmania .. .	13,849	716	13,133	1,965	(b) 502	10,666
Northern Territory	2,822	484	2,338	..	..	2,338
Aus. Cap. Territory	1,250	73	1,177	18	41	1,118
<b>Australia ..</b>	<b>678,070</b>	<b>44,767</b>	<b>633,303</b>	<b>18,609</b>	<b>17,013</b>	<b>597,681</b>
1957-58.(c)						
New South Wales	191,361	14,292	177,069	14,435	(b) 4,955	157,679
Victoria .. ..	138,017	12,466	125,551	(d)	(d)	116,368
Queensland .. .	97,102	8,351	88,751	6,720	1,730	80,301
South Australia ..	55,514	3,613	51,901	2,255	4,783	44,863
Western Australia	47,059	3,166	43,893	2,791	4,155	36,947
Tasmania .. .	11,825	700	11,125	2,509	(b) 538	8,078
Northern Territory	3,472	538	2,934	..	..	2,934
Aus. Cap. Territory	731	54	677	154	48	475
<b>Australia ..</b>	<b>545,081</b>	<b>43,180</b>	<b>501,901</b>	<b>(d)</b>	<b>(d)</b>	<b>447,645</b>

(a) No deduction has been made for depreciation and maintenance. (b) No allowance has been made for costs of power, power kerosene, petrol and other oils.

(c) Subject to revision.

(d) Not available separately.

(ii) *Net Values, 1934-35 to 1957-58.* The net value of pastoral production by States and the net value per head of population for the years 1953-54 to 1957-58, together with the average for the years 1934-35 to 1938-39, are shown below.

## NET VALUE OF PASTORAL PRODUCTION.(a)

Year.	N.S.W.(b)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(b)	Australia.
NET VALUE. (£'000.)							
Average, 1934-35 to 1938-39	30,592	16,784	13,384	4,583	4,307	1,429	71,079
1953-54 ..	202,439	108,930	81,989	47,423	43,784	7,151	491,716
1954-55 ..	175,446	112,196	82,180	45,220	36,194	7,647	(c) 461,464
1955-56 ..	163,287	104,820	86,313	44,625	36,578	7,282	(c) 446,780
1956-57 ..	231,674	129,883	112,566	62,093	47,343	10,666	(c) 597,681
1957-58(d) ..	157,679	116,368	80,301	44,863	36,947	8,078	(c) 447,645

## NET VALUE PER HEAD OF POPULATION.

(£ s. d.)

Average, 1934-35 to 1938-39	11 8 0	9 1 3	13 11 10	7 15 6	9 9 2	6 2 7	10 8 8
1953-54 ..	59 8 11	44 19 2	63 0 11	60 6 9	69 8 5	23 2 2	55 10 7
1954-55 ..	50 14 4	45 1 10	62 0 1	56 0 0	55 15 6	24 8 8	c50 15 4
1955-56 ..	46 6 7	40 17 4	63 16 3	53 9 6	54 13 6	22 16 3	c47 19 2
1956-57 ..	64 11 4	49 3 11	81 10 10	72 1 9	69 3 3	32 14 1	c62 13 8
1957-58(d) ..	43 2 1	42 19 8	57 4 6	50 12 9	52 17 10	24 3 7	c45 18 8

(a) No deduction has been made for depreciation and maintenance. Excludes payments to wool-growers of profits from the war-time wool disposal plan. (b) No allowance has been made for costs of power, power kerosene, petrol and other oils. (c) Includes estimates for Northern Territory and Australian Capital Territory. (d) Subject to revision.

5. Indexes of Quantum and Price of Pastoral Production, 1953-54 to 1957-58.—The quantum indexes relate to gross output of farm products valued at constant prices. The quantities of each farm product produced each year have been re-valued at the unit gross value for the period 1936-37 to 1938-39. The price indexes relate to average "prices" of farm products realized in the principal markets of Australia. Average quantities of each product marketed in the period 1946-47 to 1950-51 have been used as fixed weights. For further details of the methods of calculating these indexes and of the weights used, see Chapter XXX.—Miscellaneous.

INDEXES OF QUANTUM(a) AND PRICE OF PASTORAL PRODUCTION:  
AUSTRALIA.

(Base: Average 3 years ended June, 1939 = 100.)

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.(b)
<i>Quantum(a) produced—</i>					
Wool .. ..	128	132	146	164	147
Other products .. ..	117	120	123	128	127
<i>Total Pastoral</i>	<i>123</i>	<i>127</i>	<i>136</i>	<i>148</i>	<i>138</i>
Total per Head of Population .. ..	95	96	100	106	98
<i>Price—</i>					
Wool .. ..	621	540	468	607	474
Other products .. ..	401	409	424	427	459
<i>Total Pastoral</i> .. ..	<i>534</i>	<i>489</i>	<i>451</i>	<i>536</i>	<i>468</i>

(a) Index of value at constant prices, i.e., quantities revalued at average unit values of base years (1936-37 to 1938-39). (b) Subject to revision.

6. **Consumption of Meats.**—The quantity of meat (including cured and canned meat) in terms of carcass weight and edible offal available for consumption in Australia in 1957–58 was 1,029,714 tons. This is equivalent to 236.7 lb. per head compared with 237.4 lb. per head in 1956–57, and an average of 253.0 lb. during the years 1936–37 to 1938–39.

Although it is not easy to obtain strictly comparable particulars for other countries, it appears from data published by the Food and Agricultural Organization of the United Nations in its *Food Balance Sheets* that in recent years consumption of meat in Australia has been at approximately one and a half times the level of that in Canada and the United States of America.

7. **Marketing of Meat.**—(i) *General.* The Australian Meat Board, consisting of representatives of producers, processors, exporters and the Commonwealth Government, is responsible for the control of all exports of Australian meat and meat products. Further information on the powers, etc., conferred on the Board under the Meat Export Control Act 1935–1953 was given on page 801 of Official Year Book No. 40.

(ii) *United Kingdom Long-term Purchase Agreements.* Details of the long-term meat contracts with the United Kingdom Government from the outbreak of the 1939–45 War up to 30th June, 1952, and of the Fifteen Year Meat Agreement (1952–67) were given on page 710 of Official Year Book No. 41 and in earlier issues.

The Fifteen Year Meat Agreement (1952–67) between the United Kingdom and Australian Governments has as its objectives the promotion of meat production in Australia enabling increased exports to be made to the United Kingdom and the provision of a satisfactory market in the United Kingdom for that meat. It covers chilled and frozen beef, frozen veal, frozen mutton and lamb, frozen cattle and sheep sundries and edible offal.

(iii) *Cessation of Bulk Purchasing.* Following the announcement in September, 1953, that the United Kingdom Ministry of Food would cease bulk purchasing of meat, arrangements were made between the Australian Meat Board and the Ministry for the reversion to private trading in the United Kingdom. The main features of the arrangements are:—

- (a) Mutton and lamb exported after 1st July, 1954, and beef, veal and pig meats exported after 1st October, 1954, direct to United Kingdom importers are to be sold on the open market under methods similar to those which applied pre-war.
- (b) The following minimum prices, to operate until 30th September, 1955, were agreed upon:—Beef and veal, 13.18d. stg. f.o.b. per lb.; lamb, 13.61d. stg. f.o.b. per lb.; and mutton, 6.05d. stg. f.o.b. per lb. The minimum prices are to be reviewed for subsequent years.
- (c) In the event of market prices for the various classifications of meat averaging below the minimum, the Ministry is to make a payment to the Australian Government corresponding to the amount of the deficiency. So as to determine the extent of any deficiency, a procedure designed to measure as accurately as possible the weighted average level of wholesale prices of Australian meat on the United Kingdom market has been agreed upon.

(iv) *Private Trading.* After eight months of open trading, the Board estimated that a deficiency payment would be received in respect of beef for the first year. In order to make arrangements for this anticipated deficiency to be passed on to the producer, the Meat Agreement (Deficiency Payments) Act was passed by the Commonwealth Government in May, 1955. Payments were to be made on the understanding that they were, or would be, reflected in the price paid to producers.

To make provision for recoupment by the Board of any overpayment, the Meat Export (Additional Charge) Act was also passed in May, 1955.

Negotiations were made in Australia during August and September, 1955, to review minimum prices and the working of the Agreement generally. The following minimum prices were fixed for the three years ended 30th September, 1958:—For beef and veal and lamb the same as for the year ended 30th September, 1955, and for mutton the average prices realized to the end of April, 1955, (approximately 5.8d. stg. per lb.). In addition, minimum beef and veal prices were fixed for the three years 1958–61 at 5 per cent. below those for the 1955–58 period. Australia was entitled to export a free quota of 10,000 tons of beef, veal, lamb and mutton to destinations other than the United Kingdom and the Colonies. Under the terms of the Agreement, provision was made for additional free quotas to be requested should depressed prices or other circumstances justify an approach of this kind. Under this arrangement, for the year ended 30th September, 1956, an additional 5,000 tons of beef for export to any destination was agreed upon.

In July and August, 1956, the annual review of the operation of the Agreement took place in London. It was agreed that Australia be entitled to export 15,000 tons of beef, veal, mutton and lamb to destinations other than the United Kingdom and Colonies during each of the meat years 1956–57 and 1957–58.

Because of a rise in beef prices in the United Kingdom, the deficiency payments made by the Board during the year ended 30th September, 1955, exceeded the sum received from the United Kingdom for the same period. In an endeavour to recoup some of this overpayment, under the terms of the Meat Export (Additional Charge) Act, a levy of one eighth of a penny per lb. was imposed on certain classes of beef exported to the United Kingdom out of stocks placed into store from 1st February to 16th April, 1956.

From 1st October, 1955, until April, 1958, beef prices in the United Kingdom were consistently below the level of the guarantee and consequently Australia "earned" deficiency payments as follows:—

Year.	Amount.
1954-55 .. .. .	£150,000
1955-56 .. .. .	£3,250,000
1956-57 .. .. .	£5,930,000

No deficiency payments were received in 1957-58.

The receipt of these moneys enabled the Australian Meat Board to make substantial bounty payments on beef exported to the United Kingdom. The rates of payment made during the 1954-55 and 1955-56 seasons were given on pages 888-9 of Official Year Book No. 43 and on pages 920-1 of Official Year Book No. 44 for 1956-57.

For 1958, a new "chiller" grade of export beef was introduced. Beef of the new grade, whether exported in the chilled or frozen form, received a bounty of 5d. per lb. The bounty on bone-out piece beef was increased from 4d. to 5d. per lb., and on certain classes of bone-in piece beef from 3d. to 5d. per lb. The basic rate of 3d. per lb. was maintained for other 1st and 2nd quality quarter beef.

Negotiations which commenced in June, 1958, with the United Kingdom Government resulted in agreement on the following points:—

- (1) Beef minimum prices for 3 years 1961-64 will be the 1958-61 level less 9 per cent.
- (2) Lamb minimum prices for 2 years from 1958 until 1960 will be the 1955-58 level less 5 per cent.
- (3) Minimum prices for mutton for the 2 years from 1958 to 1960 will be the 1955-58 level less 15 per cent.
- (4) Beef export free quota for the 3 years 1958 to 1961 will be a maximum of 7,500 tons a year of 1st and 2nd quality beef with no restriction as to the quantity of the lower grades that may be exported.

## § 2. Horses.

1. **Distribution throughout Australia.**—About 80 per cent. of the total number of horses in Australia are in the States of New South Wales, Queensland and Victoria. In the following table, figures are shown for each State and Territory for the years 1954 to 1958, in comparison with the average for the years 1935 to 1939:—

**HORSES : NUMBER.**  
( '000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Average, 1935 to 1939 ..	537	355	444	198	154	31	33	1	1,753
1954 ..	280	141	273	52	49	17	37	1	850
1955 ..	258	132	267	49	47	16	33	1	803
1956 ..	247	119	261	44	46	15	37	1	770
1957 ..	235	108	255	41	45	14	38	1	737
1958 ..	221	98	243	35	44	13	40	1	695

The number of horses in Australia reached its maximum during 1918, when a total of 2,527,149 was recorded. The United States of America recorded its highest number in the same year and Canada in 1921. The number in Australia has declined considerably since 1918 owing to the mechanization of transport and farming. During the period 1918 to 1958, the decrease in numbers has averaged 45,000 per annum.

A graph showing the number of horses in Australia from 1860 onwards appears on page 939.

The percentage distribution of the number of horses in each State and Territory for 1958 was:—New South Wales, 32; Victoria, 14; Queensland, 35; South Australia, 5; Western Australia, 6; Tasmania, 2; and Northern Territory, 6.

2. **Oversea Trade in Horses.**—(i) *Exports.* The export of horses from Australia during the early years of this century was fairly considerable, averaging about 15,000 head per annum between 1901 and 1920, exclusive of those used for war purposes during the 1914–18 War. Since then, exports have gradually declined and in 1957–58 amounted to only 770, valued at £338,574.

(ii) *Imports.* The few horses imported into Australia are mainly valuable stud animals from the United Kingdom and racehorses from New Zealand. The total number imported in 1957–58 was 402 valued at £408,163.

### § 3. Cattle.

1. **Purposes for which Raised.**—Cattle-raising is carried out in all the States, the main object in certain districts being the production of stock suitable for slaughtering purposes, and in others the raising of profitable dairy herds. The great impetus which the development of the export trade in Australian butter gave to the dairying industry led to a considerable increase in numbers and an improvement in quality of the dairy herds in the coastal districts of Victoria, New South Wales and southern Queensland in particular, the portion of Australia in the temperate zone which is best adapted to this industry. On the other hand, beef cattle are more widely distributed, particularly in the eastern States, and are raised in areas unsuitable for dairy cattle, such as the tropical area of northern Queensland, the Northern Territory, and the Kimberley district in the north of Western Australia.

2. **Distribution throughout Australia.**—Until 1880, New South Wales was the principal cattle-raising State, but in that year Queensland took the leading position, which it has since maintained. There was a very rapid increase in the number of cattle in Australia up to the year 1894, when 12,312,000 head were depastured. From 1895 onwards, however, the effects of droughts and the ravages of tick fever reduced the number to 7,063,000 in 1902. Following the disastrous drought which terminated in the latter year, the herds were gradually built up, and, despite recurring droughts, they continued to increase up to 14,441,000 in 1921. Numbers fluctuated in succeeding years, but from 1947 to 1957 there was a general upward movement to a record level of 17,257,000 in the latter year. With the onset of very dry conditions in 1958, numbers declined slightly to 16,900,000. A graph showing the number of cattle in Australia from 1860 appears on p. 939.

The numbers of cattle (beef and dairy) in the several States and Territories in each year 1954 to 1958, compared with the average for the years 1935 to 1939, are shown below.

#### CATTLE : NUMBER.

(’000.)

Year.	N.S.W.	Vic.	Q’land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Aust.
Average, 1935 to 1939 .. .. .	3,198	1,952	6,018	331	819	262	889	9	13,478
1954 .. .. .	3,554	2,370	7,086	491	830	295	966	9	15,601
1955 .. .. .	3,461	2,456	7,238	524	861	319	969	8	15,836
1956 .. .. .	3,678	2,616	7,331	566	897	332	1,028	9	16,457
1957 .. .. .	3,911	2,765	7,462	621	957	354	1,176	11	17,257
1958 .. .. .	3,736	2,750	7,187	597	997	371	1,244	10	16,892

Although the proportion was not as high as it has been in some previous years, Queensland was carrying 43 per cent. of the cattle in Australia in 1958. The percentage in each State and Territory during that year was:—New South Wales, 22; Victoria, 16; Queensland, 43; South Australia, 4; Western Australia, 6; Tasmania, 2; and Northern Territory, 7.

Maps showing the distribution of beef and dairy cattle in Australia have been published in previous issues of the Official Year Book (*see* No. 43, pp. 909–10 for 1955; No. 39, pp. 905–6, for 1948; No. 34, pp. 453–4, for 1938–39; and No. 22, p. 660, for 1924–25).

3. **Classification of Cattle According to Purpose.**—Of the total number of cattle in Australia in 1958, 11,907,000 or 70 per cent. were classified as beef cattle. The numbers classified as beef cattle in the several States and Territories, during the years 1943 and 1954 to 1958, were as follows:—

## BEEF CATTLE : NUMBER.

('000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Aust.
1943 .. ..	1,676	577	4,893	171	605	102	978	5	9,007
1954 .. ..	2,268	829	5,703	230	600	121	966	6	10,723
1955 .. ..	2,196	856	5,861	255	633	129	969	5	10,904
1956 .. ..	2,341	954	5,946	302	673	148	1,028	6	11,398
1957 .. ..	2,577	1,044	6,087	356	733	158	1,176	8	12,139
1958 .. ..	2,429	1,026	5,917	338	771	167	1,244	6	11,898

A classification of numbers on this basis is not available prior to 1943.

Particulars relating to dairy cattle numbers will be found in Chapter XXIV.—Farm-yard, Dairy and Bee Products.

4. *Size Classifications of Cattle Herds.*—A special series of tabulations relating to rural holdings in Australia was compiled for 1955–56 and published in full detail in a series of mimeographed bulletins, *Size Classification of Rural Holdings*, 1955–56. Condensed tables also appear in *Primary Industries, Part I*, Bulletin No. 51. The tables relating to beef and dairy cattle show classifications according to size of herd, area of holding, area of wheat for grain and area of sown pastures.

5. *Comparison with other Countries.*—The following table shows the number of cattle in Australia and in some of the principal cattle-raising countries of the world for the years 1936–40 and at the latest available date. The figures, which, in general, have been compiled by the United States Department of Agriculture for publication, in *Foreign Crops and Markets* and *Foreign Agriculture Circular*, and by the Food and Agriculture Organization of the United Nations for publication in *Yearbook of Food and Agricultural Statistics: Production*, relate to areas embraced by post-war boundaries, but do not cover identical areas for the two periods in all cases.

## CATTLE : NUMBER IN VARIOUS COUNTRIES.

('000.)

Country.	Average, 1936–40.(a)	Year and Month.	Number.
India(b) .. ..	180,000	1956 (January) ..	203,800
United States of America .. ..	66,706	1958 (January) ..	93,967
U.S.S.R. .. ..	59,800	1957 (October) ..	70,400
Brazil .. ..	40,807	1958 (December) ..	68,000
Argentina .. ..	33,762	1957 (June) ..	44,200
China .. ..	25,600	1956 (May) ..	45,300
Pakistan(b) .. ..	33,000	1955 (January) ..	30,000
Ethiopia .. ..	18,000	1956 (July) ..	20,000
France .. ..	15,504	1958 (October) ..	17,928
Australia .. ..	13,285	1958 (March) ..	16,900
Mexico .. ..	11,716	1958 (December) ..	16,900
Colombia .. ..	8,010	1957 (January) ..	13,390
Turkey(b) .. ..	8,611	1958 (November) ..	12,706
Germany, Federal Republic of .. ..	12,114	1958 (December) ..	11,948
Union of South Africa .. ..	11,636	1955 (August) ..	11,709

(a) In some cases census for a single year, and in others an average for two to four years.

(b) Includes buffaloes.

6. *Imports and Exports of Cattle.*—The products of the cattle-raising industry figure largely in the export trade of Australia, although until recently the export of live cattle has never been large. In 1957–58, exports of cattle, mainly to the Philippines for slaughter, amounted to 23,941 valued at £933,000. The number of cattle imported is small, and as in the case of horses, consists mainly of valuable animals for stud purposes. Details for the years 1953–54 to 1957–58, compared with the average for the years 1934–35 to 1938–39, are as follows.

## CATTLE : IMPORTS AND EXPORTS, AUSTRALIA.

Year	Imports.		Exports.	
	No.	Value.	No.	Value.
		£'000		£'000
Average, 1934-35 to 1938-39 ..	295	22	308	6
1953-54 .. .. .	153	102	1,214	95
1954-55 .. .. .	1,679	155	6,786	346
1955-56 .. .. .	304	229	8,025	475
1956-57 .. .. .	145	123	18,360	754
1957-58 .. .. .	272	174	23,941	933

The average value per head of the cattle imported during the last five years was £307 while the average value per head of the cattle exported during the same period was £45.

7. Cattle Slaughtered.—The numbers of cattle slaughtered during each of the years ended June, 1954 to 1958, compared with the average for the years 1934-35 to 1938-39, are shown in the following table:—

CATTLE (INCLUDING CALVES) SLAUGHTERED.  
( '000.)

Year ended June—	Slaughterings passed for Human Consumption.									Total Slaughterings including Boiled Down.
	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	
Average, 1935 to 1939 .. .. .	(a)1,112	812	1,046	(b)156	(b)124	45	(b)4	2	3,301	3,331
1954 .. .. .	1,564	1,008	1,366	220	172	62	15	8	4,415	4,475
1955 .. .. .	1,518	1,024	1,430	233	181	75	16	8	4,485	4,550
1956 .. .. .	1,547	1,023	1,502	227	191	88	25	9	4,612	4,675
1957 .. .. .	1,591	1,139	1,641	252	192	102	25	10	4,952	5,017
1958 .. .. .	1,742	1,404	1,541	282	216	118	24	12	5,339	5,411

(a) Year ended March.

(b) Year ended previous December.

8. Production of Beef and Veal.—Details of the production of beef and veal in each State and Territory are shown in the following table for the years indicated:—

PRODUCTION OF BEEF AND VEAL (BONE-IN WEIGHT) : AUSTRALIA.  
( '000 tons.)

Year ended June—	N.S.W.	Vic.	Qld.	S. Aust.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Average 1935 to 1939 .. .. .	(a)173	115	181	(b)25	(b)27	9	(b)1	..	531
1954 .. .. .	221	140	258	34	35	11	3	2	704
1955 .. .. .	215	143	272	34	37	14	3	2	720
1956 .. .. .	222	139	292	38	38	15	5	2	751
1957 .. .. .	236	159	317	40	38	18	5	2	815
1958 .. .. .	233	181	270	41	39	20	5	2	791

(a) Year ended March.

(b) Year ended previous December.

9. Consumption of Beef and Veal.—For the three years 1936-37 to 1938-39, the average annual production of beef and veal in Australia was 569,000 tons of which 127,000 tons were exported, leaving a balance of 442,000 tons (or the carcass equivalent of 144 lb. per head per annum) available for consumption as fresh and canned meat. Since the 1939-45 War, consumption per head of beef and veal has been at a somewhat lower level. In 1957-58 it amounted to 126.1 lb. per head, consisting of 121.2 lb. of carcass meat and 4.9 lb. of canned meat (carcass equivalent).

In the following table, details of the production and disposal of beef and veal are shown for the years 1953-54 to 1957-58, compared with the average for the three years 1936-37 to 1938-39.

**PRODUCTION AND DISPOSAL OF BEEF AND VEAL (BONE-IN WEIGHT) :**  
**AUSTRALIA.**

('000 tons.)

Year.	Changes in Stock.	Production.	Exports.	For Canning.	Consumption in Australia as Human Food.	
					Total.	Per Head per Annum.
Average, 1936-37 to 1938-39 .. ..	.. ..	569	127	(a)	442	lb. 144.1
1953-54 .. ..	- 7	704	155	101	455	114.6
1954-55 .. ..	+ 4	720	137	106	473	116.5
1955-56 .. ..	- 7	751	163	100	495	119.1
1956-57 .. ..	+ 3	815	177	84	551	129.3
1957-58 .. ..	+ 4	791	159	87	541	124.4

(a) Included with exports.

10. Exports of Frozen Beef and Veal.—The export of frozen meat from Australia dates from about 1881, and since that year the trade has grown considerably. The quantities and values of frozen beef and veal exported during the five pre-war years ended 1938-39 and in each year 1953-54 to 1957-58, are shown in the following table:—

**EXPORTS OF FROZEN BEEF AND VEAL : AUSTRALIA.**

Year.	Exports of Frozen and Chilled Beef.		Exports of Frozen Veal.	
	Quantity.	Value.	Quantity.	Value.
Average, 1934-35 to 1938-39 .. ..	'000 lb. 231,355	£'000. 3,188	'000 lb. 10,353	£'000. 165
1953-54 .. ..	313,198	21,697	3,779	349
1954-55 .. ..	271,772	21,408	4,626	491
1955-56 .. ..	318,059	22,936	4,689	495
1956-57 .. ..	331,255	22,863	3,391	408
1957-58 .. ..	276,607	20,961	5,397	609

The largest purchaser of Australian beef and veal is the United Kingdom, which during 1938-39 took about 90 per cent. of the total shipments. In 1957-58, shipments to the United Kingdom were valued at £15,084,000 or 70 per cent. of the total value of beef and veal exports, whilst exports to other Commonwealth countries amounted to £2,645,000 or 12 per cent. of the total.

Because of the preference overseas for chilled beef, the Australian beef industry was at a serious disadvantage until investigations proved that beef could be successfully transported from Australia to the United Kingdom in a chilled condition. Trial shipments began in 1932-33 and exports in subsequent years increased to a maximum of 58,963,000 lb. in 1938-39. However, the 1939-45 War seriously affected the export trade in chilled beef, which declined to a negligible amount after 1939-40. In 1957-58, chilled beef exports were 14,576,000 lb. valued at £1,063,000, whilst frozen beef exports amounted to 262,031,000 lb. valued at £19,898,000.

## § 4. Sheep.

1. **Introduction of Sheep.**—The suitability of the Australian climate and general conditions for the production of a high class of wool were recognized at an early date by Captain Macarthur, one of the pioneer sheep-breeders of New South Wales. While it would appear that the introduction of the merino sheep into Australia was not due to Macarthur, a great deal of the credit for having successfully established the sheep industry in Australia is certainly his.

2. **Movement in Sheep Numbers in Australia.**—Fluctuations in the number of sheep recorded in Australia for each year from 1860 onwards may be seen from the graph on page 940. Up to 1945, there were five marked periods of decline, but the losses were made up rapidly. In each of the years 1925 to 1945, the sheep flocks exceeded 100 million, reaching 125.2 million in 1942. During the three years ended 1947, however, a sharp decline to 95.7 million occurred. This was largely attributable to the severe drought conditions experienced during 1944, 1945 and 1946. The passing of the drought and consequent re-stocking resulted in a steady increase in sheep numbers, which at 31st March, 1957, reached the record level of 149.8 million. Dry seasonal conditions were responsible for a slight decline to 149.3 million at 31st March, 1958.

The following table shows the approximate movement in sheep numbers in Australia in 1938–39 and 1953–54 to 1957–58.

**SHEEP AND LAMBS : ANALYSIS OF MOVEMENT IN NUMBERS, AUSTRALIA.**

('000.)

Season.	Lambs Marked.	Excess of Exports.	Sheep and Lambs Slaughtered.	Estimated Number of Deaths from Disease, Drought, etc.(a)	Number at 31st March.	Annual Net Increase (+) or Decrease(-)
1938–39.. ..	25,469	67	18,900	8,817	(b)111,058	— 2,315
1953–54.. ..	32,231	86	20,922	7,351	126,944	+ 3,872
1954–55.. ..	32,804	97	22,454	6,348	130,849	+ 3,905
1955–56.. ..	36,914	97	21,180	7,362	139,124	+ 8,275
1956–57.. ..	39,902	122	19,503	9,599	149,802	+ 10,678
1957–58.. ..	36,397	120	24,417	12,347	149,315	— 487

(a) Balance figure. (b) As at 1st January, 1939—Queensland, South Australia, Western Australia, Tasmania, Northern Territory; as at 1st March, 1939—Victoria.

3. **Distribution throughout Australia.**—With the exception of a short period in the early sixties, when the flocks of Victoria outnumbered those of New South Wales, the latter State has occupied the premier position in sheep-raising, depasturing nearly one half of the sheep of Australia.

Maps showing the distribution of sheep in Australia have been published in previous issues of the Official Year Book (see No. 43, p. 911, for 1955; No. 39, p. 907, for 1948; No. 34, p. 432, for 1938–39; and No. 22, p. 659, for 1924–25).

The numbers of sheep in the several States and Territories at 31st March of each year 1954 to 1958, compared with the average for the years 1935 to 1939, are shown in the following table:—

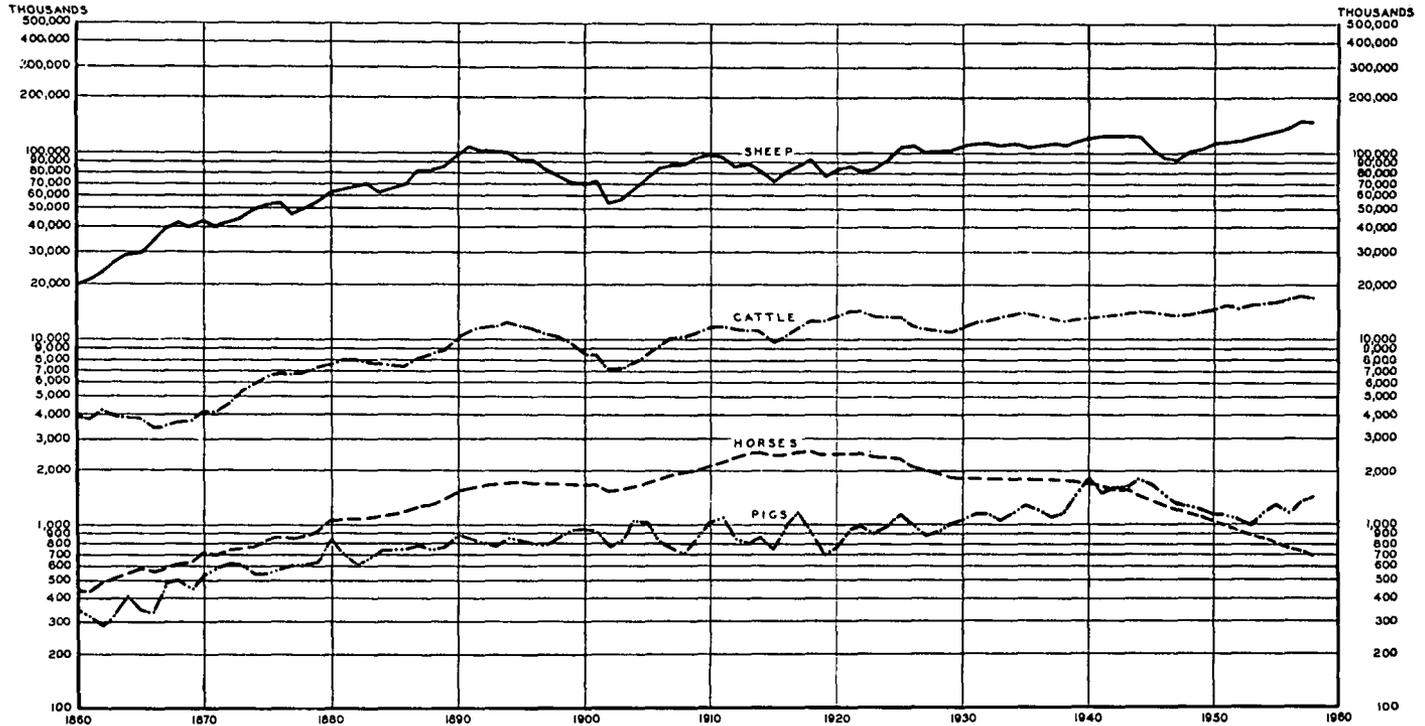
**SHEEP : NUMBER.**

('000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
Average, 1935 to 1939	..	..	..	..	..	..	..	..	..
1954 .. ..	51,774	17,555	21,061	8,515	9,839	2,312	23	240	111,319
1954 .. ..	59,639	21,438	18,194	11,838	13,087	2,465	31	252	126,944
1955 .. ..	59,200	22,330	20,222	12,817	13,411	2,595	29	245	130,849
1956 .. ..	62,988	23,343	22,116	13,585	14,128	2,673	33	258	139,124
1957 .. ..	67,670	25,831	23,190	14,984	14,887	2,943	30	267	149,802
1958 .. ..	65,410	27,090	22,274	15,236	15,724	3,298	27	256	149,315

# LIVESTOCK : AUSTRALIA, 1860 to 1958

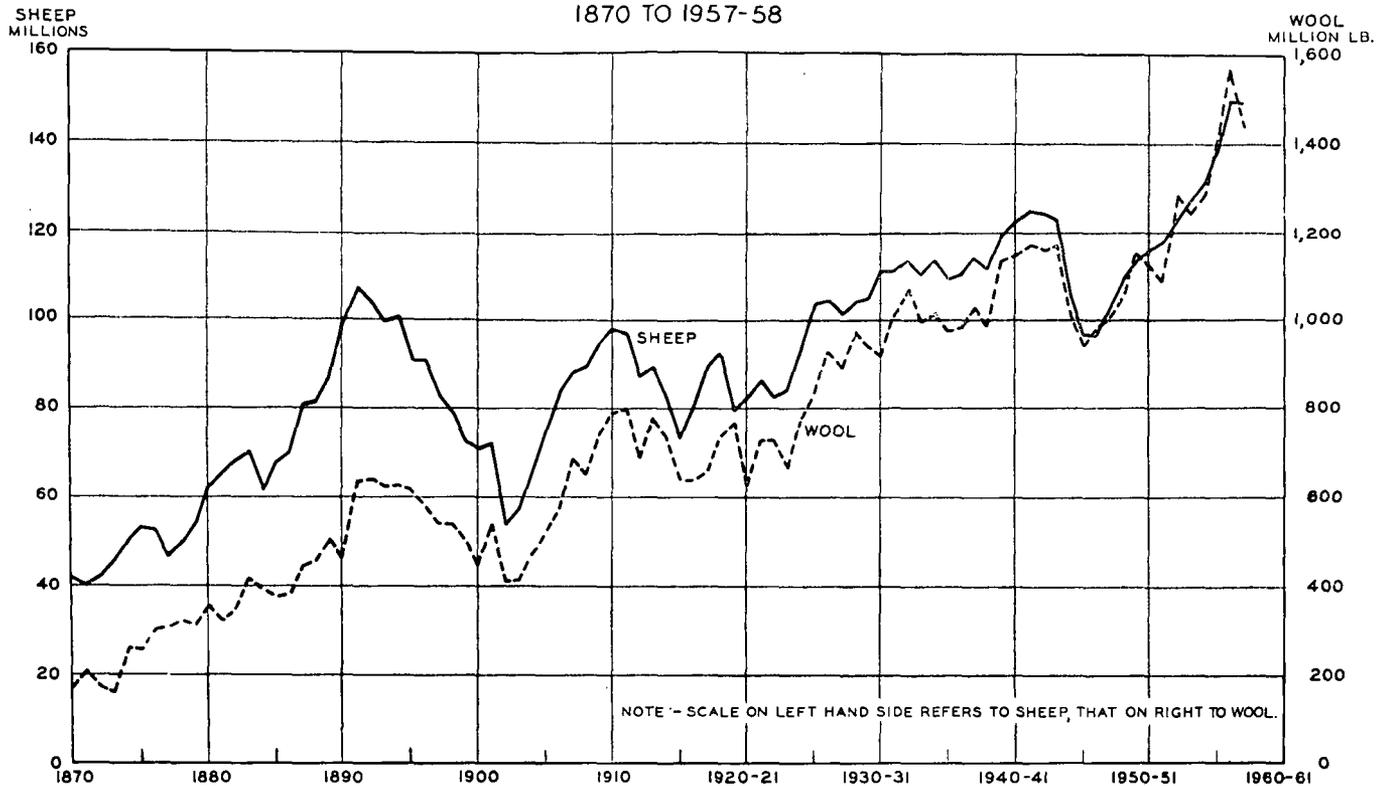
## RATIO GRAPH



NOTE:- VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE, ACTUAL NUMBERS ARE INDICATED BY SCALE.

# SHEEP NUMBERS AND WOOL PRODUCTION: AUSTRALIA

1870 TO 1957-58



Except when affected by drought, the relative number of sheep depastured in the different States in recent years has remained fairly constant.

The percentage distribution in 1958 was:—New South Wales, 44; Victoria, 18; Queensland, 15; South Australia, 10; Western Australia, 11; and Tasmania, 2.

4. **Classification of Sheep According to Age, Sex and Breed.**—In the following table, numbers of sheep in Australia are classified according to age and sex at 31st March of the years 1954 to 1958.

**SHEEP : AGE AND SEX, AUSTRALIA.**

('000.)

Description.	31st March—				
	1954.	1955.	1956.	1957.	1958.
Rams, 1 year and over ..	1,610	1,647	1,721	1,830	1,883
Breeding ewes (including ewes intended for mating) ..	55,528	58,614	62,483	66,844	66,059
Other ewes, 1 year and over ..	8,430	7,847	7,553	8,447	9,795
Wethers, 1 year and over ..	36,069	37,645	39,142	41,573	43,688
Lambs and hoggets, under 1 year ..	25,307	25,096	28,225	31,108	27,890
<b>Total, Sheep and Lambs</b>	<b>126,944</b>	<b>130,849</b>	<b>139,124</b>	<b>149,802</b>	<b>149,315</b>

Particulars relating to the principal breeds of sheep at 31st March, 1956, the last year for which these details are available, are shown in the following table:—

**SHEEP : PRINCIPAL BREEDS, 31st MARCH, 1956.**

('000.)

Breed.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.(a)	A.C.T.	Aust.
Merino ..	49,994	9,934	21,777	11,482	12,987	301	33	236	106,744
Other recognized breeds ..	3,491	5,314	71	910	439	1,345	..	13	11,583
Merino comebacks(b) ..	3,792	2,449	64	281	140	377	..	4	7,107
Crossbreeds(c) ..	5,711	5,646	204	912	562	650	..	5	13,690
<b>Total ..</b>	<b>62,988</b>	<b>23,343</b>	<b>22,116</b>	<b>13,585</b>	<b>14,128</b>	<b>2,673</b>	<b>33</b>	<b>258</b>	<b>139,124</b>

(a) As at 31st December, 1955. (b) Merino comeback is the progeny of a crossbred merino ewe and a merino ram, i.e., finer than half-bred. (c) Half-bred and coarser.

5. **Numbers of Sheep on Rural Holdings.**—A special series of tabulations relating to rural holdings in Australia was compiled for 1955–56 and published in full detail in a series of mimeographed bulletins—*Size Classification of Rural Holdings 1955–56*. Condensed tables also appear in *Primary Industries, Part I*. Bulletin No. 51. The tables relating to sheep farming show classifications according to size of flock, area of holding, area of wheat for grain and area of sown pasture.

6. **Comparison with other Countries.**—Australia has long occupied the leading position amongst the sheep raising countries of the world in respect of the size of its flocks and the quantity and quality of wool produced. In 1956–57, Australian flocks numbered 150 million sheep, compared with an estimate of 205 million for the U.S.S.R., China, and Eastern Europe, about 46 million in Argentina and about 42 million in New Zealand. The total world sheep population was estimated at about 915 million in 1956–57. Further details of sheep numbers in the principal wool producing countries of the world for 1955–56 and 1956–57 compared with the average for the period 1934–35 to 1938–39, are given in the table on page 947.

7. **Oversea Imports and Exports of Sheep.**—As in the case of cattle, the oversea exports of live sheep from Australia are of comparatively little importance. On 27th November, 1929, the export of stud merino sheep was prohibited, except with the approval of the Minister for Primary Industry. Exports of sheep are now principally for slaughter overseas. Consignments for this purpose in recent years were made chiefly to Singapore from Western Australia. The following table shows the imports and exports of all sheep for the years 1953–54 to 1957–58 compared with the average for the years 1934–35 to 1938–39.

**SHEEP : IMPORTS AND EXPORTS, AUSTRALIA.**

Year.	Imports.		Exports.	
	No.	Value.	No.	Value.
		£'000.		£'000.
Average, 1934–35 to 1938–39 ..	3,795	30	65,188	67
1953–54 .. .. .	247	14	86,526	304
1954–55 .. .. .	232	13	97,146	340
1955–56 .. .. .	4,437	89	101,837	332
1956–57 .. .. .	7,445	212	129,480	482
1957–58 .. .. .	2,256	90	122,628	466

8. **Sheep Slaughtered.**—The following table shows the numbers of sheep slaughtered in the several States during each of the years ended June, 1954 to 1958, compared with the average for the years ended June, 1935 to 1939:—

**SHEEP (INCLUDING LAMBS) SLAUGHTERED.**

(‘000.)

Year.	Slaughterings Passed for Human Consumption.									Total Slaughterings including Boiled Down.
	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	
Average, 1934–35 to 1938–39 ..	a 6,474	7,797	1,101	b 1,703	b 1,178	358	(b) ..	25	18,636	18,693
1953–54 .. .. .	7,360	7,709	1,081	2,637	1,545	594	3	63	20,992	21,065
1954–55 .. .. .	7,318	8,714	1,009	2,799	1,673	643	3	74	22,233	22,303
1955–56 .. .. .	6,840	7,860	1,186	2,358	1,796	645	2	73	20,760	20,797
1956–57 .. .. .	6,951	7,038	1,270	2,329	1,907	684	2	66	20,247	20,310
1957–58 .. .. .	7,761	9,624	1,378	3,278	1,856	734	4	74	24,709	24,878

(a) Average, years ended March.

(b) Average, years ended December 1934 to 1938.

9. **Production of Mutton and Lamb.**—Details of the production of mutton and lamb in each State and Territory are shown below:—

**PRODUCTION OF MUTTON AND LAMB.**

(Tons.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Average, 1934–35 to 1938–39 ..	103,706	135,149	20,166	29,710	20,476	6,035	1	396	315,639
1953–54 .. .. .	124,530	135,622	19,692	45,471	27,266	11,073	72	1,086	364,812
1954–55 .. .. .	122,499	155,611	18,550	49,853	28,413	11,901	78	1,259	388,164
1955–56 .. .. .	120,615	146,228	23,020	44,339	32,759	11,778	59	1,333	380,131
1956–57 .. .. .	121,947	131,253	23,866	42,563	33,303	12,607	49	1,198	366,786
1957–58 .. .. .	127,800	169,107	24,381	53,681	31,942	13,221	90	1,254	421,476

10. **Consumption of Mutton and Lamb.**—For the three years 1936–37 to 1938–39, the annual production of mutton and lamb averaged 319,000 tons of which 88,900 tons were exported leaving a balance of 230,100 tons (or the carcass equivalent of 74.8 lb. per head per annum) available for consumption.

Civilian consumption of mutton and lamb (in carcass equivalent weight including that used for canning) during the 1939–45 War rose substantially, but fell again in 1946–47 and up to 1951–52 was lower than in pre-war years. It rose during succeeding years to a level of 78 lb. per head in 1952–53 which has since been maintained except for a slight drop recorded in 1955–56 and 1956–57.

In the following table details of the production and disposal of mutton and lamb are shown for the periods stated:—

**PRODUCTION AND DISPOSAL OF MUTTON AND LAMB (BONE-IN WEIGHT) :  
AUSTRALIA.**

(\*000 tons.)

Year.	Changes in Stock.	Pro- duction.	Exports.	For Canning and Dehydra- tion.	Consumption in Australia.	
					Total.	Per Head per Annum. (lb.)
<b>MUTTON.</b>						
Average 1936–37 to 1938–39 ..	..	201	17	..	184	59.8
1953–54 .. ..	— 7	238	25	16	204	51.4
1954–55 .. ..	— 1	240	15	15	211	52.1
1955–56 .. ..	— 1	234	15	16	204	49.1
1956–57 .. ..	+ 2	224	10	13	199	46.8
1957–58 .. ..	+ 1	261	19	24	217	49.8
<b>LAMB.</b>						
Average 1936–37 to 1938–39 ..	..	118	72	..	46	15.0
1953–54 .. ..	+ 1	127	19	..	107	26.9
1954–55 .. ..	..	148	42	..	106	26.0
1955–56 .. ..	..	145	36	..	109	26.2
1956–57 .. ..	+ 1	143	24	..	118	27.7
1957–58 .. ..	— 1	150	29	..	122	28.0

11. **Exports of Frozen Mutton and Lamb.**—The export trade in mutton and lamb preserved by cold process expanded rapidly up to 1913 when 205 million lb. were shipped. It declined in subsequent years and it was not until 1942–43 that it almost reached this level again. In earlier years, shipments consisted mainly of frozen mutton, but in 1923–24 lamb supplanted mutton and the exports of lamb were largely responsible for the increase in total shipments during the ten years to 1942–43. Exports, however, have fallen again since 1942–43 and in 1957–58 amounted to only 106,622,000 lb., consisting of 64,352,000 lb. lamb and 42,270,000 lb. mutton.

The quantities and values of exports of frozen mutton and lamb in each year 1953–54 to 1957–58 compared with the average for the five years ended 1938–39 are shown in the following table.

## EXPORTS OF FROZEN MUTTON AND LAMB : AUSTRALIA.

Year.	Exports of Frozen Mutton.		Exports of Frozen Lamb.		Exports of Frozen Mutton and Lamb.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 lb.	£'000.	'000 lb.	£'000.	'000 lb.	£'000.
Average, 1934-35 to 1938-39 ..	40,584	656	153,606	4,208	194,190	4,864
1953-54 .. .. .	55,590	1,964	44,102	3,298	99,692	5,262
1954-55 .. .. .	33,811	1,626	94,982	10,191	128,793	11,817
1955-56 .. .. .	34,657	1,885	81,626	7,867	116,283	9,752
1956-57 .. .. .	23,012	1,322	53,262	4,773	76,274	6,095
1957-58 .. .. .	42,270	2,253	64,352	6,132	106,622	8,384

As with beef, the principal customer in this trade is normally the United Kingdom. In 1957-58, exports of mutton and lamb to this country represented 58 per cent. and 86 per cent., respectively, of the total quantities exported.

## § 5. Wool.

1. **General.**—Australia is the leading wool-growing country in the world. With less than one-sixth of the world's sheep, Australia produces more than one-quarter of the world's wool, (29 per cent. in 1957-58) and about half of the total fine-quality merino wool. The bulk of the production is exported, mainly as greasy wool, although substantial amounts of scoured and carbonized wool, wool on sheep skins and small quantities of semi-manufactured wool are also shipped. The remainder, which is used by Australian manufacturers, has amounted to only five per cent. of the total production (greasy basis) in recent years.

The important position held by Australia among the principal sheep and wool producing countries of the world is shown in the table on page 947.

2. **Greasy and Scoured Wool.**—Whether the weight of the wool clip should be stated as "in the grease" or as "clean" is a matter which seriously affects comparisons between the clips of different seasons and of different countries. The quantity of grease and other matter in a fleece differs, not only between countries, but between districts in the same country. It fluctuates with the vagaries of the season, and with the breed and the condition of the sheep.

From 1946-47 to 1952-53, the Australian Wool Realization Commission, and from 1953-54, the Wool Statistical Service, has assessed annually the clean yield of the Australian wool clip. Apart from a slight fall in 1953-54 when the yield fell to 55.7 per cent. from 57.5 per cent. in the previous year, a steady increase in the yield of clean from greasy wool was maintained from 1946-47 to 1956-57. In 1957-58, however, another fall occurred, the yield being 56.7 per cent. compared with 57.7 per cent. in 1956-57. A standard factor of 93 per cent. is taken as the clean yield of Australian scoured wools.

Wool scoured, washed and carbonized in Australia before export, however, has a clean yield somewhat lower than for the whole clip, because the grade of greasy wool treated locally for export as scoured, washed or carbonized includes a large proportion of dirty and low-grade wool. In recent years, it has approximated 53 per cent. The quantity of this wool exported during 1957-58 was approximately 13 per cent. of the total raw wool exports (excluding wool exported on skins) in terms of greasy.

3. **Production.**—The bulk of the Australian wool production is shorn from live sheep. In recent years, approximately 3 per cent. has been obtained by fellmongering and about 5 per cent. has been on skins exported. Statistics of wool production are compiled from data received from growers, fellmongers, etc. The following table shows the production for the five years 1953-54 to 1957-58 compared with average production for the five years ended 1938-39. Particulars of the gross value of wool produced are based, for shorn wool, upon the average price realized for greasy wool sold at auction, and for skin wools, on prices recorded by fellmongers and skin exporters.

## WOOL: TOTAL PRODUCTION (IN TERMS OF GREASY).

Particulars.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.
New South Wales ..	480,670	544,934	540,977	593,712	660,343	557,287
Victoria ..	165,586	223,481	253,364	273,356	299,572	296,490
Queensland ..	164,971	174,414	176,548	194,014	227,664	204,375
South Australia ..	85,120	145,509	155,761	173,697	188,808	185,843
Western Australia ..	81,543	134,442	129,662	156,454	156,402	158,281
Tasmania ..	15,504	20,116	23,797	23,418	28,663	29,154
Northern Territory(a) ..	35	290	311	393	346	291
Australian Capital Territory ..	1,827	2,276	2,232	2,328	2,457	2,133
<i>Australia—</i>						
Shorn (including Crutchings) ..	888,677	1,138,108	1,173,906	1,303,944	1,457,387	1,319,941
Dead and Fellmongered	50,396	47,000	44,417	44,051	37,724	30,894
Exported on Skins ..	56,183	60,354	64,329	69,377	69,144	83,019
<i>Total—Quantity ..</i>	<i>995,256</i>	<i>1,245,462</i>	<i>1,282,652</i>	<i>1,417,372</i>	<i>1,564,255</i>	<i>1,433,854</i>
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
.. <i>Value ..</i>	<i>51,182</i>	<i>409,768</i>	<i>367,138</i>	<i>354,064</i>	<i>507,615</i>	<i>(b)362,683</i>

(a) Estimated.

(b) Subject to revision.

4. Care Needed in Comparing Clips.—In comparing successive clips, allowance must be made for the circumstance that, owing to climatic or other conditions, the time of shearing may be so far delayed in some areas that one clip may include almost thirteen months' growth of wool, while the succeeding one may include little more than eleven months' growth.

5. Average Weights of Fleeces Shorn.—The average weights of sheep and lamb fleeces shorn in each of the States of Australia and in the Australian Capital Territory are shown in the following table for each season 1953-54 to 1957-58 compared with the average for the five seasons 1934-35 to 1938-39.

AVERAGE WEIGHT OF SHEEP AND LAMB FLEECES SHORN.  
(lb.)

State.	Average, 1934-35 to 1938-39. (a)	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>SHEEP.</b>						
New South Wales ..	8.87	9.53	9.32	10.01	9.92	8.45
Victoria ..	7.84	9.04	9.83	10.41	11.02	9.69
Queensland ..	7.98	9.87	9.23	9.96	9.98	8.93
South Australia ..	10.06	11.72	11.86	12.68	13.14	11.60
Western Australia ..	8.53	10.53	9.76	11.33	10.73	10.54
Tasmania ..	7.62	8.13	9.31	8.85	10.07	9.38
Australian Capital Territory ..	8.32	9.38	9.03	9.75	10.20	8.28
<i>Australia(b) ..</i>	<i>8.57</i>	<i>9.78</i>	<i>9.69</i>	<i>10.45</i>	<i>10.51</i>	<i>9.30</i>
<b>LAMB.</b>						
New South Wales ..	2.75	3.02	2.90	3.11	3.30	2.75
Victoria ..	2.14	2.53	2.62	2.78	3.11	2.71
Queensland ..	2.89	3.66	3.61	4.18	4.09	3.76
South Australia ..	2.57	3.35	3.29	3.92	4.11	3.37
Western Australia ..	2.57	2.79	2.50	2.88	2.78	2.77
Tasmania ..	1.37	2.04	2.14	2.36	2.46	2.40
Australian Capital Territory ..	1.11	1.31	1.16	1.33	1.52	1.19
<i>Australia(b) ..</i>	<i>2.57</i>	<i>2.97</i>	<i>2.91</i>	<i>3.22</i>	<i>3.37</i>	<i>2.91</i>

(a) Mean of average weights in each season.

(b) Excludes Northern Territory.

6. **Wool classified according to Quality.**—Under control exercised during the 1939–45 War, records were kept of the classification of each lot of wool appraised according to quality, degree of fault and combing or carding type for each of the years 1940–41 to 1945–46. From the resumption of auctions in 1946–47 to 23rd October, 1953, this analysis was continued by the Australian Wool Realization Commission and from 23rd October, 1953, by the Wool Statistical Service, but the basis of the data has been changed to the catalogues of auction sales, and not upon appraisal as previously. The following table provides a detailed analysis of wool sold at auction according to quality, for the years 1953–54 to 1957–58. "Quality" ("64's, 60's, 58's," etc.) is a measure of the fineness and texture of wool for spinning purposes. Broadly, it means the maximum number of hanks of yarn, each of 560 yards length, which can be spun from 1 lb. of combed wool. For instance, wool of 64's quality is of a fineness and texture which will produce 64 hanks, each of 560 yards, from 1 lb. of tops (combed wool) of that particular wool.

**CLASSIFICATION OF GREASY WOOL SOLD AT AUCTION(a) : AUSTRALIA.**

(Bales of approximately 300 lb.)

Pre-dominating Quality.	1953-54.		1954-55.		1955-56.		1956-57.		1957-58.	
	Quantity.	Per cent.								
70's and finer	98,307	2.7	95,055	2.5	86,925	2.1	100,011	2.1	114,188	2.7
64/70's ..	441,906	12.0	415,012	10.9	424,946	10.2	527,264	11.1	609,897	14.3
64's ..	612,776	16.6	595,519	15.6	583,929	14.0	690,038	14.5	696,064	16.4
64/60's ..	357,936	9.7	376,607	9.9	390,633	9.4	478,418	10.1	392,933	9.2
60/64's ..	702,871	19.1	752,490	19.7	833,228	20.0	987,496	20.8	847,824	19.9
60's and 60/58's	596,709	16.2	641,970	16.8	746,019	17.9	804,363	16.9	645,119	15.2
Total 60's and finer	2,810,505	76.3	2,876,653	75.4	3,065,680	73.6	3,587,590	75.5	3,306,025	77.7
58's ..	377,931	10.2	416,419	10.9	503,868	12.1	502,566	10.6	435,436	10.2
56's ..	293,926	8.0	312,055	8.2	350,219	8.4	376,660	7.9	297,662	7.0
50's ..	123,609	3.3	125,878	3.3	146,640	3.5	162,533	3.4	116,329	2.7
Below 50's ..	41,907	1.1	42,523	1.1	47,505	1.1	50,055	1.0	38,514	0.9
Oddments ..	39,212	1.1	44,209	1.1	53,747	1.3	74,226	1.6	65,348	1.5
Grand Total	3,687,090	100.0	3,817,737	100.0	4,167,659	100.0	4,753,630	100.0	4,259,314	100.0

(a) All greasy wool sold at auction except "wool re-offered account buyer".

7. **World Sheep Population and Wool Production.**—The following table shows particulars of the sheep population and total production of wool, in terms of greasy, in the principal wool-producing countries of the world, together with estimates of world production of merino, crossbred and carpet type wool for the latest available years compared with pre-war years. The data have been taken from reports published by the Commonwealth Economic Committee compiled from questionnaires prepared by the Committee and the International Wool Textile Organization and from other official sources.

In 1957–58, Australia produced 29 per cent. of the world total of all types of wool, the share of the British Commonwealth representing approximately 50 per cent. The principal wool producers, other than Australia, are New Zealand with 10 per cent. of the world total, Argentina, 8 per cent., United States of America, 6 per cent., and Union of South Africa, 6 per cent. Production in the U.S.S.R., China, and Eastern European countries together amounted to 17 per cent. World production of wool (all types) in 1957–58 was about 1,200 million lb. (32 per cent.) greater than the average for 1934–38.

Australia's wool clip is predominantly merino; New Zealand and Argentina produce mainly crossbred wool, while the clip of the U.S.S.R. is largely of the carpet type. World production of merino wool in 1957–58 was 21 per cent. above the average for 1934–38, and the production of crossbred types has risen by about 57 per cent. Carpet wool production has risen by about 16 per cent.

## ESTIMATED WORLD SHEEP POPULATION AND PRODUCTION OF WOOL.

Country and Type.	Sheep Numbers ('000,000).			Wool Production ('000,000 lb.— in terms of greasy).		
	Average 1934-35 to 1938-39.	1955-56.	1956-57.	Average, 1934-38.	1956-57.	1957-58. (a)
<i>British Commonwealth—</i>						
Australia .. .. .	111.6	139.1	149.8	995	1,564	1,433
New Zealand .. .. .	30.2	40.3	42.4	299	491	496
South Africa (b) .. .. .	38.6	38.0	38.0	261	321	299
Other Commonwealth .. .. .	97.6	93.6	94.8	230	225	232
<i>Total</i> .. .. .	<i>278.0</i>	<i>311.0</i>	<i>325.0</i>	<i>1,785</i>	<i>2,601</i>	<i>2,460</i>
<i>Foreign—</i>						
U.S.S.R., China, Eastern Europe (c) .. .. .	126.0	200.0	205.0	435	829	892
Argentina .. .. .	41.0	45.2	45.7	376	388	409
United States of America .. .. .	52.5	31.3	30.8	470	307	293
Uruguay .. .. .	18.0	23.0	24.0	114	190	200
Other Foreign .. .. .	221.5	284.5	284.5	608	764	765
<i>Total</i> .. .. .	<i>459.0</i>	<i>584.0</i>	<i>590.0</i>	<i>2,003</i>	<i>2,478</i>	<i>2,559</i>
<i>Grand Total</i> .. .. .	<i>737.0</i>	<i>895.0</i>	<i>915.0</i>	<i>3,788</i>	<i>5,079</i>	<i>5,019</i>
<b>Type of Wool.</b>						
<i>Apparel Type—</i>						
Merino .. .. .				1,579	2,040	1,960
Crossbred .. .. .				1,265	1,920	1,915
Carpet type .. .. .				944	1,119	1,144

(a) Provisional. (b) Basutoland and S.W. Africa Territory excluded from sheep population, but included in wool production. (c) Comprising U.S.S.R., Poland, Czechoslovakia, Hungary, Romania, Bulgaria, Eastern Germany, Albania, China and Dependencies, Outer Mongolia and Tibet.

8. War-time Contracts.—(i) *Wool*. Details of the contract entered into between the Governments of Australia and the United Kingdom for the purchase of the surplus wool clip of Australia for the duration of the war and one full clip thereafter (1939-40 to 1945-46) will be found in Official Year Book No. 36, page 1106.

(ii) *Sheepskins*. Details of the war-time contract arrangements for the period April, 1940, to June, 1946, between the Australian and United Kingdom Governments for the purchase of Australia's exportable surplus of woolled sheepskins will be found in Official Year Book No. 37, page 875.

9. Australian Wool Realization Commission.—The Australian Wool Realization Commission was the Australian subsidiary of a Joint Organization (commonly referred to as "J.O.") set up by the Governments of the United Kingdom, the Commonwealth of Australia, the Dominion of New Zealand and the Union of South Africa, under the title of "U.K.—Dominion Wool Disposals Limited" to dispose of accumulated war-time stocks of Dominion wool held by the United Kingdom Government at the end of the war. Details of the functions and operations of these organizations appear in earlier issues of the Year Book, particularly No. 38, pages 919-923.

By the end of 1951, the Joint Organization had disposed of all stocks of wool held and shortly after it went into voluntary liquidation. Liquidation proceedings were completed on 15th February, 1954.

Australia's share of the profits arising from the operations of J.O. amounted to approximately £93 million (including interest). The task of distributing the profits to growers was entrusted to the Australian Wool Realization Commission and up to May, 1956, all but £2.5 million of the total value of the profits, plus a small amount representing mainly unclaimed moneys, had been distributed to growers.

The distribution of the remaining £2.5 million was held up by the protracted litigation known as the "Poulton Case". The moneys concerned represented the profits on wool which was submitted by growers for wartime appraisalment through dealers. Mr. Poulton, a dealer, sought to establish the right of the dealers to these profits, but the High Court

ruled against him on two occasions. The decision of a single High Court judge was given in November 1953, and the unanimous decision of the Full High Court was given in December, 1953. However, as the possibility existed that Mr. Poulton might seek leave to appeal to the Privy Council against the High Court's decision, the Government withheld distribution for that reason. By May, 1956, Mr. Poulton had not taken any action to seek leave to appeal to the Privy Council and the Government, after consulting its legal advisers, decided to distribute the profits to the growers. The Commission has now almost completed this task.

10. *Australian Wool Bureau.*—(i) *General.* The Australian Wool Bureau was constituted under the Wool Use Promotion Act 1953 and replaced the Australian Wool Board which was established in 1936. The Bureau's main function is to promote the use of wool by publicity and other means in Australia and overseas.

The Bureau consists of seven members appointed by the Governor-General for a term of three years. Of the seven members, three represent the Australian Wool and Meat Producers' Federation, three the Australian Woolgrowers' Council and the other member is nominated by the Commonwealth Government.

Particulars of the activities of the Bureau are given in para. 12, Wool Publicity and Research.

(ii) *Wool Statistical Service.* The Wool Statistical Service, formerly conducted by the Australian Wool Realization Commission, was taken over by the Australian Wool Bureau on 23rd October, 1953. The Statistical Service is responsible for the preparation and publication of statistical material relating to the Australian wool market and the composition of the Australian clip and other special statistical work which may be assigned to it.

It is financed out of the income received by the Australian Wool Bureau from wool stores under its control and from an annual contribution by the Commonwealth Government.

A Statistical Service Committee, consisting of the representatives of the Australian Wool Bureau, the Commonwealth Government, wool buyers, wool growers and wool selling brokers' organizations, acts in an advisory capacity to the Australian Wool Bureau.

(iii) *Wool Stores.* Some three hundred wool stores, formerly the property of the Joint Organization and purchased from it by the Commonwealth Government, were transferred to the ownership of the Australian Wool Bureau by virtue of the Wool Stores Act 1953. The Bureau formally assumed control of these stores on 11th January, 1954, and at the same time received a substantial sum of money representing accumulated rentals and receipts from sales which had come to hand whilst the stores were held by the Commonwealth Government. Under the Act, the Bureau may only dispose of these stores with the permission of the Minister for Primary Industry and, in the event of war, may be required to return the stores without compensation to the Commonwealth Government. The stores are let by the Wool Bureau as a commercial proposition. The rental income is used to meet the expenses of maintaining, managing and insuring the stores, to defray the cost of operating the Wool Statistical Service and to help finance the wool promotion activities of the Bureau.

(iv) *The Contributory Charge.*—Associated legislation, namely, the Wool (Contributory Charge) Act 1945 (subsequently replaced by the Wool (Contributory Charge) Act (No. 1) 1950–1951 and the Wool (Contributory Charge) Act (No. 2) 1950–1951) and the Wool (Contributory Charge) Assessment Act 1945–1951, provided for a contributory charge to be imposed on woolgrowers on all shorn wool produced in Australia and sold after a date fixed by proclamation. The passage of amending Wool Tax legislation in June, 1952, made it possible to cease collection of the contributory charge at 30th June, 1952, and the legislation under which it was imposed was repealed. Further particulars of the Wool Contributory Charge and the amounts collected appear in Year Book No. 40, pages 675 and 819.

(v) *The Wool Levy.* While the contributory charge legislation, mentioned above, was in force, the Wool Levy, which was imposed by the Wool Tax Act 1936 and the Wool Tax Assessment Act 1936, was temporarily suspended. When the Wool Levy was first imposed in 1936, the rate of tax on woolgrowers was 6d. per bale on all shorn wool produced in Australia and sold. The proceeds were paid into the Wool Publicity and Research Fund administered by the Australian Wool Board.

When collection of the contributory charge ceased, (i.e., from July 1st, 1952), the Wool Levy again became operative but at a higher rate. This rate was provided for in the Wool Tax Acts (Nos. 1 and 2) of 1952 under which a rate was prescribed between limits of 2s. and 5s. per bale of shorn wool produced in Australia and sold.

Since 1952-53, the rate prescribed has been 4s. per bale. The Wool Tax Acts (Nos. 1 and 2) of 1952 were repealed in May, 1957 and replaced by the Wool Tax Acts (Nos. 1 and 2) of 1957. The 1957 Acts maintained the levy on woolgrowers for wool promotion within the limits of 2s. to 5s. per bale on shorn wool produced in Australia and sold. In addition, provision was made under the 1957 Acts for woolgrowers to be levied at a maximum rate of 2s. per bale for wool research. The operative rates prescribed are 4s. per bale for wool promotion purposes and 2s. per bale for wool research.

**11. Marketing of Wool.**—(i) *Minimum Reserve Price Plan.* Details of the minimum reserve price plan which was completed by the Governments of Australia, New Zealand, South Africa and the United Kingdom in May, 1951, and which was rejected at a referendum of woolgrowers in Australia in September, 1951, may be found in Official Year Book No. 39, page 925.

(ii) *Subsidy on Woollen Goods, 1950-51.* Details of the subsidy paid on woollen goods manufactured for consumption in Australia from wool sold during the 1950-51 season will be found in Official Year Book No. 41, page 727.

**12. Wool Publicity and Research.**—(i) *Wool Use Promotion.* The Wool Use Promotion Act 1953-1957, defines the powers and functions of the Australian Wool Bureau as including measures for promoting, by publicity or other means, the use of wool in Australia or in other countries.

The Bureau is authorized also to take measures for improving the production of wool in Australia and encouraging research directed to the promotion of the use of wool.

The Bureau is associated with the New Zealand Wool Board and the South African Wool Board in maintaining the International Wool Secretariat, which was established in 1937 with head-quarters in London and with branches in fourteen countries. The function of the Secretariat is to promote the use of wool through a broad programme of publicity, education and research.

The activities of the Australian Wool Bureau are financed from the Wool Use Promotion Fund into which are paid the proceeds of the Wool Levy, and contributions from the rental income of the wool stores as mentioned in 10 (iii) above.

(ii) *Research.* Until 1945, the Australian Wool Board was responsible for the supervision of economic and scientific research but in that year the Commonwealth Scientific and Industrial Research Organization was made responsible for scientific, technical and biological research into sheep raising and wool production, as well as wool textile research. Economic wool research is the responsibility of the Bureau of Agricultural Economics, a division of the Commonwealth Department of Primary Industry. The economic research work falls into two main categories, namely, farm production economics dealing with economics of wool growing and sheep-station management generally, and commodity research dealing with the economic aspects of the wool industry in Australia and of wool as a commodity in world trade.

To finance the research programme, the Wool Research Trust Account was established under the Wool Use Promotion Act in 1945. Originally, a sum equal to the amount raised by the Wool Levy was paid annually into this account from Consolidated Revenue. The Wool Use Promotion Act 1953-57 fixed the rate of contribution at 2s. for each bale of shorn wool produced in Australia and sold, as from 1st July, 1952.

In addition, finance was available for research from the Wool Industry Fund. This Fund was established in 1946 from various moneys accumulated by the Central Wool Committee in war-time.

Under the Wool Research Act 1957, these sources of income together with an increased Government contribution totalling 4s. a bale, effective from 1st July, 1957, and a contribution of 2s. a bale from woolgrowers, effective from 1st July, 1957, collected under the Wool Tax Acts 1957, were combined into one fund known as the Wool Research Trust Fund. The use of this Fund is limited to sheep and wool research and expenditure therefrom is based on the recommendations of the Wool Research Committee. This committee comprises representatives of the C.S.I.R.O., the Universities, the Department of Primary Industry and other interested bodies.

Ample opportunity is afforded for co-operation with State Departments of Agriculture and other organizations in research and extension activities.

(iii) *The Australian Wool Testing Authority.*—The Australian Wool Testing Authority Act 1957 assented to on 12th September, 1957, constituted the Australian Wool Testing Authority, comprised of representatives of wool buyers, wool selling brokers, wool processors, the Australian Wool Bureau, the C.S.I.R.O. and the Commonwealth Government. It is intended that ultimately the Authority should be self-financing, but during the preliminary stages, the Commonwealth Government is providing the initial capital by way of a loan.

The function of the Authority is to provide a service in Australia for carrying out various tests on wool and wool products, particularly with regard to the moisture content of scoured and carbonized wool. Testing on a commercial basis commenced in September, 1958.

In February, 1959, the Authority was notified by the International Wool Textile Organization that it would be included in the organization's list of official wool testing establishments. This is the standard of international recognition for wool testing houses and gives the Australian Wool Testing Authority the same standing as similar organizations in other countries.

13. *Consumption of Wool.*—(i) *Consumption of Raw Wool.* Statistics of raw wool consumption published in recent years for the purposes of broad international comparisons are based on the quantities of scoured or carbonized wool used on the woollen and worsted systems (mill consumption) plus quantities used in such processes as felting. Consumption estimates compiled on this basis have obvious defects as they disregard oversea trade in semi-processed wool (e.g., tops and yarn) as well as woollen goods. They are, however, comparatively simple to calculate and are useful in providing an approximate indication of trends in wool consumption. Estimates of raw wool used on the woollen and worsted systems and by felt manufacturers in Australia, are shown below for the years 1938-39 and 1953-54 to 1957-58.

#### ESTIMATED CONSUMPTION OF RAW WOOL IN AUSTRALIA.

(\*000 lb.)

Year.	Greasy Basis.			Clean Basis.		
	Used on Woollen and Worsted Systems.	Used for Felt Manufacture (including Hats).	Total.	Used on Woollen and Worsted Systems.	Used for Felt Manufacture (including Hats).	Total.
1938-39..	77,947	2,248	80,195	39,599	1,068	40,667
1953-54..	88,106	8,376	96,482	52,975	3,979	56,954
1954-55..	82,923	7,552	90,475	48,930	3,587	52,517
1955-56..	92,374	7,586	99,960	54,847	3,603	58,450
1956-57..	108,255	5,218	113,473	65,504	2,479	67,983
1957-58..	103,742	6,520	110,262	62,774	3,097	65,871

(ii) *Consumption of Locally Processed Wool.* As considerable quantities of tops, noils and yarn are exported from Australia, the series on raw wool consumption shown above is over-stated to this extent. The series entitled "Consumption of Locally Processed Wool" provides a more reliable indication of wool consumption in Australia, as allowance has been made for exports of wool in semi-processed form. This series is shown below for the years 1938-39 and 1953-54 to 1957-58. Briefly, the series measures consumption of wool in terms of yarn used in Australian mills and other factories to produce woollen cloth and other woollen goods, yarn used for hand knitting purposes, and scoured wool used for felt manufacture. No allowance has been made for oversea trade in woollen piece goods, clothing, etc., because of the obvious difficulties of estimating accurately the wool content of these products.

## ESTIMATED CONSUMPTION OF LOCALLY PROCESSED WOOL IN AUSTRALIA.

('000 lb.)

Year.	Greasy Basis.				Clean Basis.			
	Worsted Yarn Used. (a)(b)	Woollen Yarn Used. (b)	Scoured Wool used for Felt Manufacture (including Hats).	Total.	Worsted Yarn Used. (a)(b)	Woollen Yarn Used. (b)	Scoured Wool used for Felt Manufacture (including Hats).	Total.
1938-39 ..	31,568	21,393	2,248	55,209	16,353	11,130	1,068	28,551
1953-54 ..	44,698	28,639	8,376	81,713	26,245	17,650	3,979	47,874
1954-55 ..	41,056	26,599	7,552	75,207	23,775	16,299	3,587	43,661
1955-56 ..	43,041	27,837	7,586	78,464	25,176	17,014	3,603	45,793
1956-57 ..	44,325	30,093	5,218	79,636	26,172	18,737	2,479	47,388
1957-58 ..	41,930	32,160	6,520	80,610	24,804	20,160	3,097	48,061

(a) Includes hand knitting yarns used except in 1938-39. (b) Includes wool content of yarns containing a mixture of wool and other fibres.

14. Exports of Wool.—(i) *Greasy—Quantities.* Prior to the 1939-45 War, Australian greasy wool exported overseas was sent principally to the United Kingdom and other European countries. In 1938-39, 42 per cent. of total shipments were sent to the United Kingdom, other important consignees being France, 20 per cent., Belgium, 13 per cent., and Japan, 9 per cent. During the 1939-45 War, exports to the United States of America showed great expansion but have since dwindled to about 3 per cent. Of the total shipments in 1957-58, 23 per cent. went to the United Kingdom, 19 per cent. to Japan, 17 per cent. to France, 12 per cent. to Italy and 9 per cent. to Belgium-Luxemburg. The following table shows the quantities of greasy wool exported, and the principal countries of recorded destination.

## EXPORTS OF GREASY AND SLIPE WOOL.

('000 lb. actual weight.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
United Kingdom ..	288,450	286,509	299,571	275,573	306,504	251,305
Other Commonwealth Countries ..	2,188	9,672	9,973	9,315	12,246	8,643
Belgium-Luxemburg ..	108,120	87,814	90,078	93,668	105,963	102,197
France ..	100,511	162,536	159,764	199,797	215,150	179,480
Germany, Fed. Rep. of ..	(a) 36,856	52,974	64,779	74,945	82,897	66,117
Italy ..	21,730	114,354	89,457	93,266	123,438	130,062
Japan ..	131,305	95,121	124,718	189,852	233,036	203,988
United States of America ..	25,739	62,889	58,962	48,059	37,454	21,235
Other Foreign Countries ..	47,981	118,154	65,371	82,347	92,509	119,279
Total ..	762,880	990,023	962,673	1,066,822	1,209,197	1,082,306

(a) Pre-war Germany.

(ii) *Scoured and Washed and Carbonized—Quantities.* The exports of "scoured and washed" wool, whether carbonized or not, are shown below according to principal countries of destination.

**EXPORTS OF WOOL—SCOURED AND WASHED AND CARBONIZED.**  
(\*000 lb. actual weight.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
United Kingdom ..	32,826	28,111	26,227	24,303	24,298	19,525
Canada ..	2,394	4,093	4,120	5,356	3,220	3,901
Other Commonwealth Countries ..	939	1,709	1,098	1,285	1,538	1,857
Belgium-Luxemburg ..	8,224	6,098	5,127	3,601	4,017	2,734
France ..	9,301	7,890	5,994	5,309	6,243	6,205
Germany, Fed. Rep. of ..	(a) 3,007	5,594	5,818	8,329	10,583	12,252
Italy ..	361	6,314	4,657	6,017	7,671	7,405
Japan ..	736	1,699	836	2,428	3,943	720
United States of America ..	668	9,141	16,866	16,919	13,294	13,575
Other Foreign Countries ..	5,756	10,119	11,476	11,397	15,928	20,068
<b>Total ..</b>	<b>64,212</b>	<b>80,768</b>	<b>82,219</b>	<b>84,944</b>	<b>90,737</b>	<b>88,242</b>

(a) Pre-war Germany.

(iii) *Tops, Noils and Waste.* Particulars of the exports of tops, noils and waste are shown in the following table.

**EXPORTS OF WOOL TOPS, NOILS AND WASTE.**  
(\*000 lb. actual weight.)

Particulars.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Tops ..	5,948	4,970	5,911	11,107	14,949	16,921
Noils ..		3,722	3,625	4,507	4,578	3,298
Waste—Soft wool ..		3,705	2,238	7,094	14,697	3,484
Hard wool ..		3,272	3,928	3,617	4,428	3,195

(iv) *Total Exports—Greasy and Clean Bases.* The following table shows the estimated greasy and clean weights of exports of raw and semi-processed wool for the years 1938-39 and 1953-54 to 1957-58.

**EXPORTS OF WOOL—GREASY AND CLEAN BASES.**  
(\*000 lb.)

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>GREASY BASIS.</b>						
<i>Raw Wool—</i>						
Greasy and Slips ..	795,728	990,023	963,583	1,067,654	1,209,840	1,082,724
Scoured and Washed and Carbonized ..	137,391	155,620	154,838	158,774	171,848	167,125
Exported on Skins ..	58,187	60,354	64,329	69,377	69,144	83,036
<b>Total ..</b>	<b>991,306</b>	<b>1,205,997</b>	<b>1,182,750</b>	<b>1,295,805</b>	<b>1,450,832</b>	<b>1,332,885</b>
<i>Semi-processed Wool—</i>						
Tops ..	10,124	8,946	10,403	19,993	27,058	30,627
Yarn ..	58	189	229	123	149	158
<b>Total ..</b>	<b>1,001,488</b>	<b>1,215,132</b>	<b>1,193,382</b>	<b>1,315,921</b>	<b>1,478,039</b>	<b>1,363,670</b>
<b>CLEAN BASIS.</b>						
Raw Wool ..	(a)	676,033	667,347	741,653	841,371	760,295
Semi-processed Wool ..	5,071	5,376	6,160	11,510	16,080	18,195
<b>Total ..</b>	<b>(a)</b>	<b>681,409</b>	<b>673,507</b>	<b>753,163</b>	<b>856,451</b>	<b>778,490</b>

(a) Not available.

(v) *Total Value of Exports.* The value of wool (other than wool on sheepskins) exported from Australia during the five years ended 1957-58 averaged 48 per cent. of the total value of exports of merchandise of Australian origin, and during 1957-58 the proportion was 47 per cent. The value during the period under review, together with the principal countries to which wool was exported, is shown in the following table.

VALUE OF WOOL EXPORTS(a).  
(£'000.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
United Kingdom ..	19,235	117,718	107,917	83,096	117,372	79,582
Other Commonwealth Countries ..	705	6,901	6,839	8,060	9,920	8,026
Belgium-Luxemburg ..	5,863	27,522	25,620	21,391	29,608	22,130
France ..	5,618	58,448	50,473	53,388	73,494	52,831
Germany, Fed. Rep. of (b)	2,603	21,936	22,926	23,603	32,987	24,592
Italy ..	1,340	47,323	32,379	29,259	47,905	41,703
Japan ..	7,727	43,685	46,077	64,761	103,770	74,301
United States of America	2,247	30,239	29,801	21,636	20,705	12,864
Other Foreign Countries	3,429	56,661	31,076	32,335	47,964	57,368
<b>Total ..</b>	<b>48,767</b>	<b>410,433</b>	<b>353,108</b>	<b>337,529</b>	<b>483,725</b>	<b>373,397</b>

(a) Excludes wool exported on sheepskins.

(b) Pre-war Germany.

15. *Local Sales of Wool.*—Auction sales are conducted at Sydney, Goulburn, Newcastle, Albury, Melbourne, Geelong, Ballarat, Brisbane, Adelaide, Perth, Albany, Hobart and Launceston, and are attended by buyers representing manufacturers and merchants in the United Kingdom, France, the United States of America, Japan, U.S.S.R. and many other countries. More than 95 per cent. of the Australian wool clip is now disposed of at auction in Australia.

16. *Stocks of Wool.*—Stocks of raw wool held in Australia at 30th June, 1958 amounted to 210.4 million lb. (as in the grease) of which 65.5 million lb. (41.4 million lb. as greasy and 24.1 million lb. as scoured and carbonized) were held by woollen mills, wool scourers and fellmongers and 144.9 million lb. assumed to be all greasy were held by brokers. Of the wool held by brokers, 32.3 million lb. were unsold wool and 112.6 million lb. were sold wool held awaiting shipment. These stocks exclude wool on skins, since this wool is not recorded as production until fellmongered in Australia or exported on skins.

Stocks at 30th June, 1957, were 211.8 million lb. including 136.0 million lb. of sold wool. Prior to 30th June, 1957, no information was available about the stocks of sold wool held by brokers. During the war and post-war years up to 1951, raw wool stocks were exceptionally high because of the large quantities held in Australia by the Australian Wool Realization Commission on account of Joint Organization. They reached a maximum in 1945, but declined in each successive year to 1952, by which time all Joint Organization stocks had been sold.

17. *Price.*—Wool is the chief factor in the pastoral wealth of Australia and the nation's prosperity is largely dependent upon its satisfactory sale. During the five years ended 1957-58, the price of greasy wool sold in the selling centres of Australia averaged 71.1d. per lb. compared with the average selling price of 11.5d. per lb. during the ten years ended 1938-39. The average for the nine years ended 1928-29 was 18d. per lb., and for the seven years ended 1913-14, 9d. per lb.

As indicated in para. 8 above, the price of wool during the 1939-45 War was determined by the British Government wool contract. With the return to auction sales since 1945-46, the average price of greasy wool sold rose rapidly from the contract price of 15.45d. per lb. applicable in 1945-46 to the unprecedented level of 144.19d. per lb. in 1950-51. This was followed by a sharp fall and prices, in the years 1951-52 to 1957-58, fluctuated in the range 61d. to 82d. The average selling price in 1957-58 was 62.5d.

The prices quoted above, except for United Kingdom contract prices, are as compiled by the National Council of Wool Selling Brokers and represent the average price realized for all greasy wool, of whatever type or quality, marketed during the years indicated.

18. **Value.**—Fluctuation in Australian wool prices has a marked effect on the nation's rural income. In 1945-46, the gross value of wool production was £58,597,000 representing 17.4 per cent. of the gross value of all rural industries, while in 1950-51, when prices reached a peak, wool was valued at £651,902,000 or 55.6 per cent. of the total for all rural industries. The value of wool production fell in subsequent years and in 1957-58 was £362,683,000.

Details of the value of wool production for the years 1953-54 to 1957-58, compared with the average for the three pre-war years, are shown below.

**WOOL (IN TERMS OF GREASY)—ESTIMATED GROSS VALUE OF TOTAL PRODUCTION.(a)**  
(£'000.)

Season.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	N.T.(b)	A.C.T.	Aust.
Average, 1936-37 to 1938-39	26,276	9,322	9,247	4,111	3,389	980	2	98	53,425
1953-54 ..	180,781	73,384	61,125	44,434	42,523	6,655	90	776	409,768
1954-55 ..	155,335	75,125	52,109	41,602	35,013	7,232	68	654	367,138
1955-56 ..	149,128	69,020	53,134	39,911	35,881	6,190	92	708	354,064
1956-57 ..	217,124	97,659	77,522	57,289	46,965	9,974	106	976	507,615
1957-58(c) ..	142,613	76,256	53,836	42,354	39,209	7,742	67	606	362,683

(a) Includes shorn, dead and fellmongered wool and wool exported on skins. Excludes distributions of profits under the Wool Disposal Plan. (b) Estimated. (c) Subject to revision.

19. **United Kingdom Importation of Wool.**—The important position which Australia occupies in the supply of wool to the United Kingdom is indicated in the following statement of the quantities of wool imported into that country from the principal wool-producing countries during each year 1954 to 1958.

**WOOL(a): IMPORTS INTO UNITED KINGDOM.**  
(<sup>000</sup> lb.)

Country of Origin.	1954.	1955.	1956.	1957.	1958.
Australia .. ..	291,704	336,800	310,585	315,310	292,404
New Zealand .. ..	186,352	185,440	163,550	166,050	168,742
Union of South Africa .. ..	61,826	64,315	61,194	45,563	52,597
India and Pakistan .. ..	35,235	30,505	25,912	29,889	22,717
Other Commonwealth Countries .. ..	9,396	9,785	9,583	11,410	9,673
Argentina .. ..	21,784	31,553	32,740	32,484	29,178
France .. ..	15,707	18,092	22,228	16,657	18,727
Uruguay .. ..	37,070	18,855	34,373	17,448	23,350
Other Foreign Countries .. ..	24,920	25,977	39,156	40,536	41,845
<i>Total Quantity</i> .. ..	<i>683,994</i>	<i>721,322</i>	<i>699,321</i>	<i>675,347</i>	<i>659,233</i>
Total Value (£'000 sterling) .. ..	184,670	176,995	167,927	188,754	134,122

(a) Greasy and Scoured.

Australian wool represented 44 per cent. of the total quantity imported into the United Kingdom during 1958. New Zealand supplied 26 per cent. and South Africa 8 per cent., while the total quantity received from British countries constituted 83 per cent. of all United Kingdom imports of wool.

20. **Principal Importing Countries and Sources of Supply.**—The following table, prepared from information published by the Commonwealth Economic Committee, furnishes, in respect of the principal importing countries, details of their production and imports of wool for 1957 together with the chief sources of supply. The quantities imported refer to the actual weight of wool without distinguishing between greasy and scoured except in the case of the United States of America where estimated clean content of raw wool is quoted.

**WOOL: PRINCIPAL IMPORTING COUNTRIES AND SOURCES OF SUPPLY, 1957.**  
 (Million lb.)

Importing Country.	Pro- duction of Importing Country. (a)	Quantity Imported from(b)—					Total Imports.
		Australia.	New Zealand.	Union of South Africa.	Argen- tina.	Other Countries.	
United Kingdom ..	105	315.3	166.1	45.6	32.5	115.8	675.3
Belgium .. ..	(c)	108.7	25.6	12.0	11.1	31.9	189.3
France .. ..	55	233.2	104.0	47.2	30.6	28.3	443.3
Germany (Federal Republic) ..	(c)	109.0	38.8	41.5	13.8	58.2	261.3
Italy .. ..	32	145.7	16.5	23.4	15.4	49.1	250.1
Japan .. ..	(c)	229.3	10.0	9.9	8.7	16.9	274.8
United States of America(d) ..	307	34.8	26.7	9.5	54.9	73.2	199.1

(a) As in the grease, 1956-57. (b) Actual weight of greasy and scoured wool. (c) Not available. (d) Imports are in terms of estimated clean content of greasy and scoured wool. Actual weight of total United States of America imports was 273.6 million lb.

As a considerable transit trade exists between continental countries, it must not be assumed that the whole of the imports recorded by these countries are retained for their own consumption. The countries chiefly concerned with the transit trade are the United Kingdom (11 per cent. of total imports re-exported in 1957) and Belgium.

### § 6. Trade in Hides and Skins.

1. **Extent of Trade.**—In addition to the hides and skins treated locally, considerable quantities are exported. The value of cattle and horse hides, and sheep and other skins, sent overseas during 1957-58 amounted to £25,393,000 compared with a total of £24,269,000 in 1956-57 and £20,882,000 in 1955-56.

2. **Sheepskins with Wool.**—The exports of sheepskins with wool constitute the most important item in the values referred to in the preceding paragraph. Of the total exports of £20,219,000 during 1957-58, France obtained 81 per cent. and the United Kingdom 9 per cent. The exports of sheepskins with wool during each of the years 1953-54 to 1957-58 compared with the average for the years 1934-35 to 1938-39 were as follows:—

#### EXPORTS OF SHEEPSKINS WITH WOOL: AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Number .. '000	12,009	13,647	14,841	14,891	14,239	19,441
Value.. .. £'000	2,780	15,569	15,569	15,268	19,438	20,219

3. **Sheepskins without Wool.**—Up to 1943-44, sheepskins without wool were exported chiefly to the United States of America. During 1943-44, that country accounted for 97 per cent. of the total shipments. In subsequent years, however, there has been a decline in shipments to the United States of America and an increase in the quantities shipped to other countries. Of the total value of £232,000 of sheepskins without wool exported in 1957-58 the United States of America received only 36 per cent., France received 37 per cent. and the United Kingdom 20 per cent. Quantities and values for the five years 1953-54 to 1957-58 compared with the average for the years 1934-35 to 1938-39, are shown in the table hereunder:—

#### EXPORTS OF SHEEPSKINS WITHOUT WOOL: AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Number .. '000	808	2,482	2,147	1,771	1,353	813
Value.. .. £'000	70	671	372	424	479	232

4. **Hides.**—(i) *Exports.* The export trade in cattle hides and calf skins during 1957–58 was distributed as follows:—Japan, £700,000; Federal Republic of Germany, £663,000; Italy, £568,000; The Netherlands, £493,000; United Kingdom, £309,000; Sweden, £113,000 and other countries £394,000.

The exports during each of the five years 1953–54 to 1957–58, compared with the average for the years 1934–35 to 1938–39, are shown in the table below:—

**EXPORTS OF CATTLE HIDES AND CALFSKINS: AUSTRALIA.**

Particulars.	Average, 1934–35 to 1938–39.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
Quantity .. '000 lb.	(a) 1,677	18,761	33,817	45,981	45,111	50,557
Value .. £'000	957	1,381	1,874	2,722	2,524	3,240

(a) '000 skins.

Horse hides exported during 1957–58 weighed 2,220,158 lb. and were valued at £125,170.

(ii) *Imports.* The imports of cattle hides and calfskins are fairly large, the chief sources of supply being New Zealand and the Pacific Islands. The quantities and values of cattle hides, including calfskins, imported into Australia during the years 1953–54 to 1957–58, compared with the average for the years 1934–35 to 1938–39, were as follows:—

**IMPORTS OF CATTLE HIDES AND CALFSKINS: AUSTRALIA.**

Particulars.	Average, 1934–35 to 1938–39.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
Quantity .. cwt.	70,781	16,960	12,391	10,537	11,064	9,443
Value .. £'000	279	174	108	58	66	67

5. **Furred Skins.**—The exports of furred skins were valued as follows:—

**EXPORTS OF FURRED SKINS: AUSTRALIA.  
(£'000.)**

Description.	Average, 1934–35 to 1938–39.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
Rabbit and Hare ..	(a) 1,150	849	1,100	1,711	975	913
Opossum ..	125	104	42	15	53	91
Kangaroo and Wallaby ..	191	202	281	285	279	350
Other ..	69	1	7	2	6	11
<b>Total ..</b>	<b>1,535</b>	<b>1,156</b>	<b>1,430</b>	<b>2,013</b>	<b>1,313</b>	<b>1,365</b>

(a) Excludes hare skins.

These skins were shipped principally to the United States of America, the United Kingdom, and Belgium and Luxemburg, the values shipped to each in 1957–58, with 1956–57 values in parentheses, being:—United States of America, £1,047,000 (£951,000); United Kingdom, £203,000 (£147,000) and Belgium-Luxemburg, £33,000 (£125,000).

6. **Marketing of Hides and Skins.**—(i) *Sheepskins with Wool.* Details of the agreement between the United Kingdom and Commonwealth Governments for the purchase by acquisition of the “exportable surplus” of woolled sheepskins in Australia during the 1939–45 War were given in Official Year Book No. 37, page 886. The contract expired on 30th June, 1946, and sheepskins have since been marketed mostly at open auction.

(ii) *Sheep and Lamb Pelts.* Details of the marketing control of sheep and lamb pelts were given in Official Year Book No. 38, page 930. Pelts have reverted to open marketing without export restrictions.

(iii) *Hides and Leather.* A hide acquisition and marketing scheme operated from November, 1939 to August, 1954. The Australian Hide and Leather Industries Board, which administered the scheme, acquired all cattle hides and yearling and calf skins produced in Australia at set prices and allocated them to tanners at these prices. Further details of the war-time operations of the scheme will be found in Official Year Book No. 37, page 887 and Official Year Book No. 38, pages 930-1.

Pre-war, about 40 to 45 per cent. of Australian production was exported but, with the development of the local tanning industry, the proportion is now approximately 30 per cent.

(iv) *Rabbit Skins.* A marketing control scheme for rabbit skins was introduced under the National Security (Rabbit Skins) Regulations on 10th June, 1940, and terminated in April, 1949. Details of the scheme will be found in Official Year Book No. 38, page 931.

## § 7. Tallow and Lard.

1. *Consumption of Tallow in Factories.*—Details of consumption are collected from the principal factories using tallow (soap and candle, chemical and woollscouring works).

Total consumption of tallow in factories as shown in the table below for the years 1938-39 and 1953-54 to 1957-58 is deficient, however, to the extent that no allowance is made for the small unrecorded amounts used in other types of establishments.

### TALLOW: CONSUMPTION IN FACTORIES, AUSTRALIA.

(cwt.)

Year.	Quantity Used.	Year.	Quantity Used.
1953-54 .. .. .	1,172,710	1956-57 .. .. .	1,207,578
1954-55 .. .. .	1,193,368	1957-58 .. .. .	1,329,771
1955-56 .. .. .	1,210,694		

2. *Exports of Tallow and Lard.*—Particulars of exports of edible (including lard) and inedible tallow are shown in the following table for the five years 1953-54 to 1957-58 in comparison with the average for the five years ended 1938-39.

### TALLOW AND LARD: EXPORTS, AUSTRALIA.

(cwt.)

Particulars.	Average, 1934-35 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Edible(a) .. .. .	(b)	158,875	74,401	142,498	128,649	130,817
Inedible.. .. .	606,934	823,816	365,985	829,403	936,951	878,060
<b>Total .. .. .</b>	<b>(b)</b>	<b>982,691</b>	<b>440,386</b>	<b>971,901</b>	<b>1,065,600</b>	<b>1,008,877</b>

(a) Including lard and sweetened fats.

(b) Not available.

3. *Marketing of Tallow.*—Until 30th September, 1952, the bulk of Australia's exportable surplus tallow, other than collar white mutton tallow was sold to the United Kingdom Ministry of Food under a series of annual contracts. The 1951-52 contract was not renewed and on 9th November, 1952, tallow export control was removed following termination of the industry's equalization pool arrangement and price de-control in most States.

## § 8. Exports of Principal Pastoral Products.

The quantities and values of the principal pastoral products of Australia exported for the years 1955-56 to 1957-58 were as follows:—

## EXPORTS OF PASTORAL PRODUCTS: AUSTRALIA.

Product.	Unit of Quantity.	Quantity.			Value (£'000.)		
		1955-56.	1956-57.	1957-58.	1955-56.	1956-57.	1957-58.
<b>Animals (living)—</b>							
Cattle .. .. .	No.	8,025	18,360	23,941	475	754	933
Horses .. .. .	"	582	682	770	264	326	339
Sheep .. .. .	"	101,837	129,480	122,628	332	482	466
Bones .. .. .	'000 cwt.	24	20	12	49	47	24
Glycerine .. .. .	'000 lb.	1,379	1,011	673	129	57	44
Hair and Bristles .. .. .	cwt.	1,928	2,299	2,147	98	151	128
Hoofs .. .. .	"	10,461	10,936	6,533	24	23	20
Horns .. .. .	"	9,347	9,104	8,475	76	81	58
<b>Meats—</b>							
Frozen Beef and Veal <sup>(a)</sup> .. .. .	'000 lb.	322,748	334,646	282,004	23,431	23,271	21,570
" Mutton and Lamb .. .. .	"	116,283	76,274	106,622	9,752	6,095	8,384
" Rabbits and Hares .. .. .	Value only	..	..	..	1,855	2,513	2,802
" Other .. .. .	"	..	..	..	3,833	3,202	3,457
Preserved in Tins, etc. .. .. .	'000 lb.	130,591	112,193	131,834	18,230	13,175	15,100
Other (excluding Bacon and Ham) .. .. .	Value only	..	..	..	1,005	849	1,148
Sausage Casings .. .. .	"	..	..	..	2,128	1,700	2,615
<b>Hides and Skins—</b>							
Cattle and Calf .. .. .	'000 lb.	45,981	45,111	50,557	2,722	2,524	3,240
Horse .. .. .	"	2,204	1,940	2,220	136	117	125
Sheep and Lamb .. .. .	'000	16,662	15,592	20,254	15,692	19,917	20,451
Rabbit and Hare .. .. .	'000 lb.	3,327	2,464	3,686	1,711	975	913
Tallow (Edible and Inedible) .. .. .	cwt.	956,678	1,057,145	995,046	4,027	4,373	4,311
<b>Wool—</b>							
Greasy .. .. .	'000 lb.	1,063,493	1,206,625	1,080,634	293,839	425,728	325,509
Scoured, Tops, Noils, Waste .. .. .	"	114,598	131,961	116,813	43,690	57,997	47,888

(a) Includes chilled beef.

## CHAPTER XXIV.

## FARMYARD, DAIRY AND BEE PRODUCTS.

NOTE.—Values of Australian oversea trade shown throughout this chapter are expressed as £A. f.o.b. port of shipment, except where otherwise indicated.

## § 1. Introductory.

1. **General.**—The introduction of cattle into Australia and the early history of the dairying industry are referred to in some detail in earlier issues of this publication. It may be noted here that an increased and improved milk supply has resulted from the crossing of imported stud cattle with the original stock and from the further judicious crossing of strains. In Australia, dairy cattle thrive in the open throughout the year, local climatic conditions demanding no protection other than tree plantations for shelter and, in certain districts, rugging in the coldest weather. Indigenous and imported grasses furnish food during the greater part of the year, and winter fodder, when necessary, is given to the cattle in the fields. With the wider application of scientific methods in the treatment of animals and pastures and in the processes of manufacture, coupled with herd testing and effective State supervision, the dairying industry has shown rapid expansion. It has been demonstrated that Australian production and marketing methods do not adversely affect the vitamin content of the butter and that the loss during cold storage even for as long as two years is insignificant.

2. **Mixed Farming.**—Dairying is not, as formerly, wholly confined to agriculturists since many graziers also give it their attention. In non-coastal regions, it is generally carried on in conjunction with agriculture and sheep-raising, sufficient fodder being grown to carry the cattle through the winter months. The extent to which dairy cattle were run in conjunction with beef cattle, sheep, and pigs in 1955–56 is shown in the relevant tables published in a series of mimeographed bulletins *Size Classification of Rural Holdings, 1955–56*, and also appears in summarized form in *Primary Industries, Part I.—Rural Industries, 1956–57, Bulletin No. 51*.

3. **Employment.**—The numbers of persons employed in rural industries are ascertained at the annual census of rural production. The particulars collected are in respect of those persons who were permanently engaged in the actual work of the farm and include owners, lessees, tenants or sharefarmers, relatives over 14 years of age not receiving wages, and other permanent employees, including managers and relatives, working for wages or salary. For some earlier years, and uniformly from March, 1950, particulars have also been collected of the numbers of temporary employees at 31st March of each year. Details of the numbers so engaged are given in Chapter XXII.—Agricultural Production, § 29.

Persons who described themselves at the population census as being engaged in dairy farming comprised 96,508 males and 10,018 females, a total of 106,526 persons at the Census of 30th June, 1947, and 100,553 males and 11,004 females, a total of 111,557 persons, at the Census of 30th June, 1954.

4. **Growth of the Dairying Industry.**—The following table gives some indication of the growth of the dairying industry since 1918–19.

## DAIRYING INDUSTRY: AUSTRALIA.

Year.	Number of Dairy Cows at 31st March.			Production of—			Milking Machines (No. of Stands). <sup>(a)</sup>
	In Milk.	Dry.	Total.	Milk for all Purposes.	Butter (Factory and Farm).	Cheese (Factory and Farm).	
				Million Gallons.	Tons.	Tons.	
1918-19 ..	1,319,588	582,448	1,902,036	529.6	81,162	10,621	(b)
1928-29 ..	1,744,728	600,342	2,345,070	815.4	129,817	13,490	(b)
1938-39 ..	2,600,707	608,812	3,209,519	1,189.9	203,500	29,304	(b)
1948-49 ..	2,339,885	818,725	3,158,610	1,208.9	165,830	43,202	144,916
1953-54 ..	2,262,783	995,891	3,258,674	1,189.7	159,585	49,057	189,542
1954-55 ..	2,338,658	943,485	3,282,143	1,325.8	191,078	45,193	196,877
1955-56 ..	2,393,870	1,009,637	3,403,507	1,402.0	208,911	38,700	204,298
1956-57 ..	2,354,301	1,097,149	3,451,450	1,357.9	192,854	45,216	210,664
1957-58 ..	2,281,571	1,080,003	3,361,574	(c)1,261.1	(c)175,771	(c) 34,890	(c)213,716

(a) "Number of Stands" indicates the number of cows that can be milked simultaneously—i.e., the cow capacity of installed milking machines. (b) Not available. (c) Subject to revision.

5. **Official Supervision of Dairying Industry.**—Dairy experts of the various State Agricultural Departments give instruction in approved methods of production, and inspect animals, buildings and marketable produce. A high standard of cleanliness, both of *personnel* and *matériel*, prevails.

The export trade is regulated by the terms of the Commonwealth Customs Act 1901-1954 and the Commonwealth Commerce (Trade Descriptions) Act 1905-1950, and regulations thereunder. It will be sufficient to state here that the true trade description, etc., must be marked on all produce intended for export, while official inspection ensures the maintenance of purity and quality. Upon request of the exporter, the goods are given a certificate by the inspector.

6. **Australian Agricultural Council.**—General information on the constitution and functions of the Australian Agricultural Council is given on page 866 of Chapter XXII.—Agricultural Production.

## § 2. Value of Farmyard, Dairy and Bee Production and Indexes of Price and Quantum of Production.

1. **Gross Value of Farmyard, Dairy and Bee Production, 1936-37 to 1938-39 and 1953-54 to 1957-58.**—The following table shows the gross value of recorded farmyard and dairy production at the principal markets in Australia:—

### GROSS VALUE OF FARMYARD, DAIRY AND BEE PRODUCTION: AUSTRALIA. (a)

(£'000.)

Particulars.	Average 1936-37 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58. (b)
Whole Milk used for—						
Butter (c) .. .. .	22,550	57,004	67,801	78,559	66,991	61,661
Cheese(c) .. .. .	1,505	10,077	9,218	8,585	9,398	7,688
Condensing, Concentrating, etc. .. .. .	1,094	9,583	7,537	8,908	8,901	7,938
Other purposes .. .. .	7,971	49,205	50,377	52,465	55,393	58,588
Subsidy Paid on Whole Milk for Butter and Cheese .. .. .	..	15,468	16,081	14,499	13,500	13,500
Total Whole Milk (including Subsidy) .. .. .	33,120	141,337	151,014	163,016	154,183	149,375
Pigs Slaughtered .. .. .	5,526	23,773	21,263	25,543	25,948	25,084
Dairy Cattle Slaughtered .. .. .	1,591	8,437	9,652	9,625	8,721	10,907
Eggs .. .. .	9,117	43,569	40,650	42,137	43,567	42,320
Poultry .. .. .	2,386	11,396	10,835	11,666	11,432	13,150
Honey .. .. .	154	1,473	1,465	1,801	2,371	1,793
Beeswax .. .. .	10	120	133	132	157	115
<b>Total.. .. .</b>	<b>51,904</b>	<b>230,105</b>	<b>235,012</b>	<b>253,920</b>	<b>246,379</b>	<b>242,744</b>

(a) Prior to 1954-55 excludes Australian Capital Territory and Northern Territory, details for which are not available. (b) Subject to revision. (c) Excludes Commonwealth subsidy which is shown separately below.

2. Gross and Net Values, 1956-57 and 1957-58.—The values of dairy, poultry and bee farming on gross, local and net bases are shown in the following table. Further information on values, including definitions of the terms used, is given in Chapter XXX.—Miscellaneous.

GROSS, LOCAL AND NET VALUE OF FARMYARD, DAIRY AND BEE PRODUCTION. (£'000.)

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Farm.	Farm Costs.		Net Value of Production. (b)
				Fodder Fed to Farm Stock.	Value of Other Materials Used in Process of Production. (a)	
1956-57.						
New South Wales ..	81,901	11,458	70,443	12,209	(c) 382	57,852
Victoria ..	87,794	4,248	83,546	19,606	2,995	60,945
Queensland ..	35,445	1,518	33,927	5,891	2,200	25,836
South Australia ..	18,627	697	17,930	2,558	876	14,496
Western Australia ..	11,620	719	10,901	4,673	1,618	4,610
Tasmania ..	10,490	636	9,854	1,596	(c) 467	7,791
Northern Territory ..	81	4	77	10	..	67
Australian Capital Territory ..	421	21	400	129	1	270
<b>Total ..</b>	<b>246,379</b>	<b>19,301</b>	<b>227,078</b>	<b>46,672</b>	<b>8,539</b>	<b>171,867</b>
1957-58.(d)						
New South Wales ..	81,910	12,214	69,696	13,993	(c) 366	55,337
Victoria ..	86,914	4,309	82,605	(e)	(e)	58,997
Queensland ..	32,207	1,818	30,389	9,323	1,916	19,150
South Australia ..	18,640	788	17,852	4,833	1,691	11,328
Western Australia ..	11,734	909	10,825	4,893	1,743	4,189
Tasmania ..	10,907	641	10,266	1,967	(c) 498	7,801
Northern Territory ..	97	4	93	15	..	78
Australian Capital Territory ..	335	13	322	124	1	197
<b>Total ..</b>	<b>242,744</b>	<b>20,696</b>	<b>222,048</b>	<b>(e)</b>	<b>(e)</b>	<b>157,077</b>

(a) No allowance has been made for costs of materials used in the process of production in the Poultry (for States other than Queensland) and Bee-farming Industries. (b) No deduction has been made for depreciation and maintenance. (c) No allowance has been made for costs of power, power kerosene, petrol and other oils. (d) Subject to revision. (e) Not available separately.

3. Net Value of Production, 1934-35 to 1938-39 and 1953-54 to 1957-58.—In the following table, the net values of farmyard, dairy and bee production (total and per head of population) are shown by States.

NET VALUE OF FARMYARD, DAIRY AND BEE PRODUCTION.(a)

Year.	N.S.W. (b)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(b)	Australia. (c)
NET VALUE. (£'000.)							
Average, 1934-35 to 1938-39	11,848	12,238	7,118	1,938	979	943	35,064
1953-54 ..	58,985	60,595	29,758	12,525	5,540	5,761	173,164
1954-55 ..	58,323	58,577	26,237	12,498	4,686	6,406	166,983
1955-56 ..	63,000	67,329	28,630	15,320	4,885	7,671	187,179
1956-57 ..	57,852	60,945	25,836	14,496	4,610	7,791	171,867
1957-58(d) ..	55,337	58,997	19,150	11,328	4,189	7,801	157,077
NET VALUE PER HEAD OF POPULATION. (£ s. d.)							
Average, 1934-35 to 1938-39	4 8 3	6 12 2	7 4 7	3 5 11	2 3 0	4 0 10	5 2 11
1953-54 ..	17 6 5	25 0 3	22 17 8	15 18 8	8 15 8	18 12 5	19 11 1
1954-55 ..	16 17 2	23 10 10	19 16 0	15 9 6	7 4 5	20 9 4	18 7 4
1955-56 ..	17 7 7	26 5 1	21 3 4	18 7 2	7 6 0	24 0 8	20 1 11
1956-57 ..	16 2 6	23 1 8	18 14 4	16 16 7	6 14 8	23 17 9	18 0 6
1957-58(d) ..	15 2 6	21 15 11	13 12 11	12 15 8	5 19 11	23 7 0	16 2 4

(a) No deduction has been made for depreciation and maintenance or for costs of materials used in the process of production in the Poultry (for States other than Queensland) and Bee-farming Industries. (b) No deduction has been made for costs of power, power kerosene, petrol and other oils. (c) Prior to 1954-55 excludes Northern Territory and Australian Capital Territory. (d) Subject to revision.

4. Indexes of Quantum and Price of Farmyard, Dairy and Bee Production, 1953-54 to 1957-58.—For details of the methods of calculating these indexes and of the weights used see Chapter XXX.—Miscellaneous.

INDEXES OF QUANTUM(a) AND PRICE OF FARMYARD, DAIRY AND BEE PRODUCTION : AUSTRALIA.

(Base: Average 3 years ended June, 1939 = 100.)

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Quantum(a) of Production—</i>					
Milk .. .. .	104	116	123	119	111
Other Products .. .. .	113	117	115	114	120
<i>Total Farmyard and Dairy ..</i>	<i>107</i>	<i>117</i>	<i>120</i>	<i>117</i>	<i>114</i>
Total per Head of Population	83	88	89	84	80
<i>Price—</i>					
Milk .. .. .	379	370	380	365	375
Other Products .. .. .	435	375	423	438	455
<i>Total Farmyard and Dairy ..</i>	<i>395</i>	<i>371</i>	<i>392</i>	<i>386</i>	<i>398</i>

(a) Indexes of value at constant prices, i.e. quantities revalued at average unit values of base years (1936-37 to 1938-39).

§ 3. Dairy Cattle and Dairy Products.

1. Dairy Herds.—Lack of uniformity in the schedules used by the various States in the collection of livestock statistics makes it impossible to measure with complete accuracy the growth of dairy herds prior to 1943. Statistics of dairy cows—which form the largest part of herds—are, however, available on a comparable basis for a series of years. These statistics show that in 1918-19 there were 1,902,036 dairy cows (in milk and dry), compared with 2,345,070 in 1928-29 and 3,209,519 in 1938-39. The numbers remained at this level until March, 1944, but declined in succeeding years and did not regain the level of 1944 until 31st March, 1954, when the number recorded was 3,258,674. Since then numbers have increased to a record level of 3,451,450 in March, 1957, and then fallen to 3,361,574 at 31st March, 1958. There is a preponderance of dairy cattle in Victoria and Tasmania whilst in New South Wales and South Australia the proportion of dairy to all cattle is high. In Queensland, the Northern Territory, and Western Australia, other cattle predominate, the main object in these areas being the production of beef. In South Australia, the proportion of dairy cattle has fallen in recent years. The numbers of dairy cows for 1954 to 1958 shown in the following table refer to those recorded by farmers as being in milk and dry as at 31st March. The figures shown for the years 1935 to 1939 cover the same categories, but the period differs in some States (see footnote (a)). To this extent, the figures lack comparability.

NUMBER OF CATTLE AND DAIRY COWS (IN MILK AND DRY) AT 31st MARCH.

State.	Average, 1935-39. (a)	1954.	1955.	1956.	1957.	1958.
N.S.Wales	{ All Cattle .. 3,054,164	3,554,016	3,460,692	3,678,634	3,910,827	3,736,300
	{ Dairy Cows.. 1,024,761	921,866	906,774	976,089	971,868	941,854
Victoria	{ All Cattle .. 1,892,465	2,370,184	2,456,303	2,616,587	2,765,049	2,749,611
	{ Dairy Cows.. 912,621	987,345	1,025,233	1,071,437	1,112,293	1,126,792
Queensland	{ All Cattle .. 6,047,726	7,086,207	7,238,062	7,330,021	7,461,717	7,187,195
	{ Dairy Cows.. 924,875	946,230	931,568	943,323	944,516	867,285
South Australia	{ All Cattle .. 331,488	490,945	523,817	566,055	621,577	597,241
	{ Dairy Cows.. 154,870	164,230	169,822	165,865	166,549	164,046
W. Australia	{ All Cattle .. 796,473	829,694	860,574	896,897	957,175	997,173
	{ Dairy Cows.. 121,127	134,129	134,696	134,517	134,478	134,239
Tasmania	{ All Cattle .. 260,267	295,178	319,417	331,589	354,170	371,409
	{ Dairy Cows.. 93,708	102,523	111,781	110,028	119,485	125,186
Nor. Territory	{ All Cattle .. 893,925	966,033	968,775	1,027,819	1,175,997	1,252,014
	{ Dairy Cows(b)					
Aust. Cap. Ter.	{ All Cattle .. 8,261	9,394	8,500	9,399	10,596	9,532
	{ Dairy Cows.. 1,019	2,351	2,269	2,248	2,261	2,172
Australia	{ All Cattle .. 13,284,769	15,601,651	15,836,140	16,457,001	17,257,108	16,900,475
	{ Dairy Cows.. 3,232,981	3,258,674	3,282,143	3,403,507	3,451,450	3,361,574

(a) As at 31st March for New South Wales and Australian Capital Territory; 1st March for Victoria; 1st January for Queensland, South Australia, Western Australia and Tasmania. (b) No information available; assumed to be "nil".

In the next table, the dairy cattle in each State are shown in various categories as at 31st March, 1956, 1957 and 1958. Information in this detail was not collected uniformly in all States prior to 1943.

NUMBER OF DAIRY CATTLE.

State.	At 31st March	Dairy Cows.		Dairy Heifers 1 year and over.	Dairy Calves under 1 year.	Dairy Bulls.	Total Dairy Cattle.
		In Milk.	Dry.				
New South Wales ..	1956	693,112	282,977	194,397	143,385	23,944	1,337,815
	1957	686,949	284,919	191,476	147,398	23,468	1,334,210
	1958	673,289	268,565	201,655	141,013	23,045	1,307,567
Victoria .. ..	1956	780,132	291,305	308,874	239,192	43,045	1,662,548
	1957	773,273	339,020	315,506	248,031	44,734	1,720,564
	1958	741,415	385,377	317,003	235,794	44,256	1,723,845
Queensland .. ..	1956	664,443	278,880	225,627	186,900	27,889	1,383,739
	1957	630,558	313,958	215,201	187,138	27,819	1,374,674
	1958	608,142	259,143	217,770	177,736	27,178	1,269,969
South Australia ..	1956	102,507	63,358	47,217	42,416	8,805	264,303
	1957	103,976	62,573	44,831	45,307	8,797	265,484
	1958	98,640	65,406	45,672	40,485	8,595	258,798
Western Australia ..	1956	59,176	75,341	38,894	44,704	5,469	223,584
	1957	58,851	75,627	37,924	46,271	5,388	224,061
	1958	57,614	76,625	38,135	48,099	5,178	225,651
Tasmania .. ..	1956	93,163	16,865	30,884	37,817	4,873	183,602
	1957	99,315	20,170	30,333	41,573	4,503	195,894
	1958	101,165	24,021	30,897	44,095	4,595	204,773
Australian Capital Territory	1956	1,337	911	311	554	44	3,157
	1957	1,379	882	349	603	50	3,263
	1958	1,306	866	275	614	45	3,106
Australia ..	1956	2,393,870	1,009,637	846,204	694,968	114,069	5,058,748
	1957	2,354,301	1,097,149	835,620	716,321	114,759	5,118,150
	1958	2,281,571	1,080,003	851,407	667,836	112,892	4,993,709

Maps showing the distribution of dairy cattle in Australia at 31st March, 1955 and 1948, appeared on page 910 of Official Year Book No. 43 and page 906 of Official Year Book No. 39, respectively.

2. Size of Dairy Herds.—A series of special tabulations relating to rural holdings, undertaken for all States for the year 1955–56, covered, *inter alia*, a classification of holdings by size of dairy cattle herd and by area of holding, area of sown grasses and clovers, size of sheep flock, size of beef cattle herd, size of pig herd and number of milking machine stands. The tabulations have been published in full detail in a series of mimeographed bulletins *Size Classification of Rural Holdings, 1955–56*, and also appear in summarized form in *Primary Industries, Part I.—Rural Industries, 1956–57*, Bulletin No. 51.

3. Total Dairy Production.—The dairy production for each State in 1957–58 is shown below:—

DAIRY PRODUCTION, 1957–58.(a)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
MILK ('000 GALLONS).								
Used for—								
Butter ..	(b)151,744	(c)405,006	(d)146,160	29,544	31,413	50,313	24	814,204
Cheese ..	9,055	29,401	11,419	22,800	2,323	832	..	75,830
Condensing and concentrating	15,027	52,747	} 50,128	26,797	19,785	13,510	{	829
Other purposes	113,586	78,673						
<b>Total ..</b>	<b>289,412</b>	<b>565,827</b>	<b>207,707</b>	<b>79,141</b>	<b>53,521</b>	<b>64,655</b>	<b>853</b>	<b>1,261,116</b>

For footnotes see next page.

## DAIRY PRODUCTION, 1957-58. (a)—continued.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
<b>BUTTER (TONS).</b>								
In Factories ..	(e) 29,940	(f) 86,179	(f) 32,261	6,898	6,747	10,622	..	172,647
On Dairy and other Farms ..	1,500	744	348	168	108	252	4	3,124
<b>Total ..</b>	<b>31,440</b>	<b>86,923</b>	<b>32,609</b>	<b>7,066</b>	<b>6,855</b>	<b>10,874</b>	<b>4</b>	<b>175,771</b>
<b>CHEESE (TONS).</b>								
In Factories ..	4,042	13,805	(g) 5,150	10,493	1,047	326	..	34,863
On Dairy and other Farms ..	..	12	..	..	3	12	..	27
<b>Total ..</b>	<b>4,042</b>	<b>13,817</b>	<b>5,150</b>	<b>10,493</b>	<b>1,050</b>	<b>338</b>	<b>..</b>	<b>34,890</b>

(a) Subject to revision. (b) Includes milk, the produce of New South Wales, sent as cream to factories in Victoria and Queensland. (c) Includes milk, the produce of Victoria, sent as cream to New South Wales. (d) Includes milk, the produce of Queensland, sent as cream to New South Wales. (e) Includes butter made from cream, the produce of Victoria and Queensland. (f) Includes butter made from cream, the produce of New South Wales. (g) Includes cheese made in establishments not classified as factories.

4. Whole Milk.—(i) *Production and Utilization.* During the five years ended 1938-39, approximately 80 per cent. of Australia's milk supply was used for making butter, 4 per cent. for cheese manufacture, 2 per cent. for condensery products and 14 per cent. for fluid consumption and other purposes. There has since been a considerable decline in the proportion of milk used for butter-making, with corresponding increases in the quantities used for other purposes. In 1957-58, 65 per cent. of the total milk supply was used for butter, 6 per cent. for cheese, 6 per cent. for condensery products and 23 per cent. for other purposes.

Details of the production of whole milk for various purposes are shown in the following table for each year 1953-54 to 1957-58 in comparison with the average for the years 1934-35 to 1938-39:—

## PRODUCTION AND UTILIZATION OF WHOLE MILK: AUSTRALIA.

('000 Gallons.)

Year.	Total Production.	Quantity used for—			
		Butter (Factory and Farm).	Cheese (Factory and Farm).	Condensery Products.	Other purposes.
Average, 1934-35 to 1938-39	1,149,697	913,754	48,595	28,116	159,232
1953-54 .. .. .	1,189,652	737,474	105,870	75,995	270,313
1954-55 .. .. .	1,325,799	886,652	98,569	64,365	276,213
1955-56 .. .. .	1,402,012	962,397	84,021	71,324	284,270
1956-57 .. .. .	1,357,942	890,833	98,233	78,123	290,753
1957-58(a) .. .. .	1,261,116	814,204	75,830	76,875	294,207

(a) Subject to revision.

In the following table, particulars of production of whole milk in the several States are shown for the years 1953-54 to 1957-58, compared with the average for the five years ended 1938-39. Victoria is the principal milk-producing State and in 1957-58 the output from that State, 565.8 million gallons, represented 45 per cent. of total production. Output from New South Wales was 289.4 million gallons, or 23 per cent. of the total, and that of Queensland 207.7 million gallons (17 per cent.). Production in the remaining States accounted for 15 per cent. of the total Australian output.

**TOTAL PRODUCTION OF WHOLE MILK.**  
(\*000 Gallons.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
Average, 1934-35 to 1938-39 ..	331,963	402,447	278,226	63,538	40,394	32,797	332	1,149,697
1953-54 ..	282,187	474,358	249,712	85,014	49,996	47,642	743	1,189,652
1954-55 ..	315,719	536,835	275,605	90,699	54,194	52,022	725	1,325,799
1955-56 ..	333,942	577,475	282,296	90,342	55,668	61,405	884	1,402,012
1956-57 ..	306,298	587,199	252,336	89,882	57,008	64,262	957	1,357,942
1957-58(a) ..	289,412	565,827	207,707	79,141	53,521	64,655	853	1,261,116

(a) Subject to revision.

(ii) *Production per Cow.* The quantity of milk produced by a dairy cow can be as high as 1,000 gallons a year, varying greatly with breed, locality and season. For the whole of Australia for all dairy cows and for all seasons prior to 1916 production averaged considerably less than 300 gallons per annum. In later years, not only has there been an improvement in the quality of the cattle, but the application of scientific methods has been continually extended, and the 300-gallon average has been exceeded in each year since 1924. In 1957-58, the average yield was 370 gallons. The annual average yields per cow shown in the following table are based on the approximate number of dairy cows which were in milk during any part of the year. The average shown is, therefore, less than that for cows which were yielding during the greater part of the year. It should be noted that there are many difficulties attending the collection of particulars of the total quantity of milk obtained during any year. In addition, there is the further difficulty of ascertaining with reasonable accuracy the average number of cows in milk during the same period. The average yield per cow shown hereunder may be accepted as sufficiently reliable to show the general trend:—

**AVERAGE MILK PRODUCTION PER DAIRY COW.**  
(Gallons.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
Average, 1934-35 to 1938-39 ..	322	440	306	412	334	350	347	357
1953-54 ..	311	490	270	531	373	480	332	372
1954-55 ..	345	533	294	543	403	485	314	405
1955-56 ..	355	551	301	538	414	554	391	419
1956-57 ..	314	538	267	541	424	560	424	396
1957-58(a) ..	302	505	229	479	398	529	385	370

(a) Subject to revision.

5. *Factory System.*—(i) *General.* Cream separation and butter-making are often carried on together under the co-operative system. The establishment of large central butter factories either on the co-operative system or on an independent basis has resulted in a considerable reduction in the cost of manufacture. The product is also of a more uniform quality and, whereas formerly the average quantity of milk used per pound of hand-made butter was about 3 gallons, factory butter requires less than 2½ gallons. In addition, subsidy payments by the Commonwealth Government are made only on factory produced butter. As a result, the production of farm made butter has declined substantially and in 1957-58, represented only about 1.8 per cent. of all butter made. A similar position exists in the cheese-making industry where a negligible amount is now made on farms.

(ii) *Number of Factories.* In 1956-57, the factories in Australia for the manufacture of butter, cheese and condensed milk numbered 371 and were distributed among the States as follows:—New South Wales, 75; Victoria, 131; Queensland, 83; South Australia, 42; Western Australia, 18; and Tasmania, 22. More details regarding numbers of factories, output, etc., are given in Chapter VI.—Manufacturing Industry.

6. *Butter Production.*—There was a steady increase in the annual output of butter for many years prior to the 1939-45 War. The average annual production rose from 126,000 tons for the five years ended 1928-29 to 195,000 tons for the five years ended 1938-39.

Following the record output of 211,987 tons in 1939-40, the general trend of butter production declined until 1946-47, when 143,308 tons were produced. Output increased again in subsequent years and in 1955-56 was 208,911 tons, the highest figure recorded in post-war years. Production declined in the two following years and in 1957-58 amounted to 175,771 tons. The foregoing figures include butter produced on farms which has shown a decline from 8,714 tons in 1938-39 to 3,124 tons in 1957-58.

The following table shows production of butter in factories in each State for the years 1953-54 to 1957-58, compared with the average for the five years ended 1938-39:—

**BUTTER PRODUCTION IN FACTORIES.**

(Tons.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia. (a)
Average, 1934-35 to 1938-39 .. ..	52,949	62,489	53,255	7,570	5,459	3,811	185,533
1953-54 .. ..	29,713	63,616	41,797	7,586	6,142	7,263	156,117
1954-55 .. ..	38,688	79,418	45,915	8,510	7,145	8,334	188,010
1955-56 .. ..	41,066	90,608	48,189	8,562	7,404	9,962	205,791
1956-57 .. ..	33,826	88,598	41,089	8,440	7,462	10,426	189,841
1957-58(b) .. ..	29,940	86,179	32,261	6,898	6,747	10,622	172,647

(a) Northern Territory and Australian Capital Territory: nil.

(b) Subject to revision.

The table below shows the monthly production of factory butter in Australia in each of the years 1938-39 and 1953-54 to 1957-58. The annual output of farm butter is also shown.

**PRODUCTION OF BUTTER IN FACTORIES AND ON FARMS: AUSTRALIA.**

(Tons.)

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58. (a)
<b>Factories—</b>						
July .. ..	9,415	6,941	6,917	8,479	9,242	7,569
August .. ..	11,645	8,906	10,903	13,277	13,775	11,257
September .. ..	15,531	12,781	16,288	18,197	17,294	16,851
October .. ..	20,485	17,481	21,819	24,311	24,207	21,181
November .. ..	22,561	19,640	25,011	26,166	24,431	22,953
December .. ..	20,710	18,585	24,715	25,276	24,087	20,699
January .. ..	15,872	17,038	19,681	23,919	22,166	17,385
February .. ..	15,816	15,410	16,598	20,036	16,332	14,927
March .. ..	17,729	15,465	16,658	15,887	14,158	14,611
April .. ..	16,583	9,933	12,358	12,329	10,523	10,509
May .. ..	15,568	7,646	9,435	9,845	7,727	7,846
June .. ..	12,871	6,291	7,627	8,069	5,899	6,859
<b>Factory Total (b)</b> ..	<b>194,786</b>	<b>156,117</b>	<b>188,010</b>	<b>205,791</b>	<b>189,841</b>	<b>172,647</b>
<b>Made on Farms(c)</b> ..	<b>8,714</b>	<b>3,468</b>	<b>3,068</b>	<b>3,120</b>	<b>3,013</b>	<b>3,124</b>
<b>Grand Total</b> ..	<b>203,500</b>	<b>159,585</b>	<b>191,078</b>	<b>208,911</b>	<b>192,854</b>	<b>175,771</b>

(a) Subject to revision.

(b) Year ended June.

(c) Year ended March.

7. Cheese Production.—Until 1916, the annual production of cheese in factories and on farms had not reached 10,000 tons. From 1916 to 1932-33, it ranged between about 10,000 and 16,000 tons, rising in subsequent years with some reversals of trend to an output of 44,796 tons in 1949-50. Production decreased in 1950-51 and 1951-52 but by 1953-54 had risen to a record output of 49,057 tons. Production declined in the next two years to 38,700 tons, but recovered to 45,216 tons in 1956-57 mainly because of fluctuations in Victorian output. In 1957-58, production showed a considerable decline to 34,890 tons, the lowest since the end of the war.

The following table shows production of cheese in factories in each State in the years 1953-54 to 1957-58 in comparison with average output during the years 1934-35 to 1938-39:—

## CHEESE PRODUCTION IN FACTORIES.

(Tons.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia. (a)
Average, 1934-35 to 1938-39 .. ..	3,332	6,177	5,071	5,437	390	1,210	21,617
1953-54 .. ..	3,210	25,977	6,746	11,612	1,205	293	49,043
1954-55 .. ..	2,508	20,290	7,921	13,101	1,083	275	45,178
1955-56 .. ..	3,379	13,996	7,579	12,633	763	331	38,681
1956-57 .. ..	4,019	20,542	7,137	11,958	1,182	333	45,171
1957-58(b) .. ..	4,042	13,805	5,150	10,493	1,047	326	34,863

(a) Northern Territory and Australian Capital Territory: nil.

(b) Subject to revision.

The monthly production of cheese in factories in Australia, together with the annual output from farms, is shown in the table below for 1938-39 and each of the years 1953-54 to 1957-58.

## PRODUCTION OF CHEESE IN FACTORIES AND ON FARMS: AUSTRALIA.

(Tons.)

Month.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58. (a)
<b>Factories—</b>						
July .. ..	1,517	1,979	2,429	2,170	2,366	2,023
August .. ..	1,950	3,315	3,754	3,162	3,587	2,925
September .. ..	2,820	5,376	5,422	4,376	5,013	4,268
October .. ..	4,028	7,345	6,657	5,360	6,570	5,179
November .. ..	3,990	7,366	6,660	5,254	6,427	4,783
December .. ..	3,462	6,619	5,910	4,579	5,800	3,851
January .. ..	2,212	5,075	4,096	3,697	4,567	2,903
February .. ..	1,715	3,603	2,729	2,521	3,078	2,217
March .. ..	1,826	3,084	2,454	2,321	2,721	2,004
April .. ..	1,656	1,901	1,816	1,860	1,902	1,557
May .. ..	1,898	1,661	1,589	1,666	1,601	1,495
June .. ..	1,900	1,719	1,662	1,715	1,539	1,658
<b>Factory Total(b)</b> .. ..	<b>28,974</b>	<b>49,043</b>	<b>45,178</b>	<b>38,681</b>	<b>45,171</b>	<b>34,863</b>
<b>Made on Farms(c)</b> .. ..	<b>330</b>	<b>14</b>	<b>15</b>	<b>19</b>	<b>45</b>	<b>27</b>
<b>Grand Total</b> .. ..	<b>29,304</b>	<b>49,057</b>	<b>45,193</b>	<b>38,700</b>	<b>45,216</b>	<b>34,890</b>

(a) Subject to revision.

(b) Year ended June.

(c) Year ended March.

8. **Condensed, Concentrated and Powdered, etc., Milk Production.**—The manufacture of these products has expanded greatly since 1938-39 to meet the needs of the Services during the 1939-45 War and for export purposes since the war. The output of condensed milk (sweetened and unsweetened) in 1956-57 was almost three times as high as in the three years ended 1938-39, while that of powdered milk (full cream and skim) was more than four times as high. Over the same period, the quantity of whole milk used in the manufacture of the products shown below increased from 33.2 million gallons to 76.9 million gallons or by 131 per cent. These products are manufactured mainly in Victoria, which produced 69 per cent. of the total (in terms of whole milk equivalent) in 1957-58. New South Wales accounted for 19 per cent. and the remaining States for 12 per cent.

The following table shows details of the output of condensed, concentrated, powdered, etc., milk during the years 1953-54 to 1957-58, compared with the available details for the years 1936-37 to 1938-39.

**PRODUCTION OF CONDENSED, CONCENTRATED AND POWDERED, ETC.,  
MILK: AUSTRALIA.**

Year.	Full Cream Milk Products.					Milk By-products.	
	Condensed Milk (Sweetened and Un-sweetened).	Concentrated Whole Milk.(a)	Powdered Full Cream Milk.	Infants' and Invalids' Foods (including Malted Milk and Milk Sugar).	Total Whole Milk Equivalent of Full Cream Milk Products.	Powdered Skim Milk.	Powdered Butter-milk and Whey.
	Tons.	Tons.	Tons.	Tons.	'000 gals.	Tons.	Tons.
Average, 1936-37 to 1938-39	17,347	(b) 1,355	9,464	(c) 1,131	33,226	(d)	(e) 701
1953-54 .. .. .	42,386	19,464	18,905	11,739	75,995	19,804	5,358
1954-55 .. .. .	38,493	10,072	15,539	10,921	64,365	24,618	5,086
1955-56 .. .. .	44,361	16,265	17,211	12,861	71,324	30,893	4,990
1956-57 .. .. .	49,551	18,650	17,864	13,567	78,123	30,567	5,551
1957-58(f)	47,043	19,998	18,089	13,937	76,875	24,049	5,514

(a) Mainly for ice-cream manufacture. (b) Incomplete. (c) Malted milk and milk sugar only. (d) Not available separately; included with powdered full cream milk. (e) Excludes powdered whey. (f) Subject to revision.

9. *Local Consumption of Butter and Cheese.*—A system of butter rationing introduced as a war-time measure and retained until 16th June, 1950, had the effect of considerably reducing civilian consumption. In the last year of rationing, 1949-50, consumption was 25.3 lb. per head per annum compared with an average of 32.9 lb. during the years 1936-37 to 1938-39. Following the cessation of rationing, consumption rose sharply to 31.2 lb. in 1951-52, and until 1955-56 fluctuated between 29 lb. and 31 lb. per head per annum. In 1956-57 and 1957-58, however, consumption fell to 28.0 lb. and 27.8 lb. per head respectively.

Cheese consumption rose considerably during the period of butter rationing, from 4.4 lb. per head pre-war to 6.3 lb. per head in 1949-50. During the years 1952-53 to 1956-57, consumption varied between 5.3 lb. and 6.3 lb. per head, rising to 6.4 lb. per head in 1957-58.

The following table shows details of the production and disposal of butter and cheese for each of the years 1953-54 to 1957-58 compared with the average for the years 1936-37 to 1938-39:—

**PRODUCTION AND DISPOSAL OF BUTTER AND CHEESE: AUSTRALIA.**

Year.	Changes in Stocks.	Production.	Exports. (a)	Consumption in Australia.	
				Total.	Per Head per annum.
				'000 tons.	lb.
<b>BUTTER.</b>					
Average, 1936-37 to 1938-39	(b)	191.0	(c) 90.0	101.0	32.9
1953-54 .. .. .	(d) -3.0	159.5	40.9	121.6	30.6
1954-55 .. .. .	(d) +4.9	191.1	63.7	122.5	30.2
1955-56 .. .. .	(d) +4.7	208.9	83.8	120.4	29.0
1956-57 .. .. .	(d) -4.3	192.9	77.8	119.4	28.0
1957-58(e)	(d) +2.6	175.8	52.2	121.0	27.8
<b>CHEESE.</b>					
Average, 1936-37 to 1938-39	(b)	24.9	11.5	13.4	4.4
1953-54 .. .. .	+2.7	49.0	22.4	23.9	6.0
1954-55 .. .. .	-1.6	45.2	21.4	25.4	6.3
1955-56 .. .. .	-1.8	38.7	16.6	23.9	5.7
1956-57 .. .. .	+5.6	45.2	17.1	22.5	5.3
1957-58(e)	-1.5	34.9	8.6	27.8	6.4

(a) Figures for butter include ghee expressed as butter as well as butter shipped as ships' stores. Figures for cheese include ships' stores after allowance for a small quantity of cheese imported. (b) Not available. (c) Excludes ghee. (d) Includes allowance for movements in stocks other than those held in main cold stores. (e) Subject to revision.

10. **Butter and Cheese—Equalization Schemes.**—(i) *Voluntary Plan* (1926–1934). During the period from January, 1926, to April, 1934, a voluntary scheme known as the “Paterson Plan” was in operation which had the effect of stabilizing the price of butter in Australia. Details of this scheme may be found on page 1028 of Official Year Book No. 38 and in earlier issues.

(ii) *Compulsory Plan* (1934–1936). On 1st May, 1934, the “Paterson Plan” was superseded by a compulsory price equalization plan, details of which were shown on page 1029 of Official Year Book No. 38 and earlier issues. This compulsory plan was invalidated in 1936 by the decision of the Privy Council which declared in the James (Dried Fruits) Case that the Commonwealth had no power under the Constitution to regulate trade between the States.

(iii) *Voluntary Plan* (1936 to date). Since the Privy Council decision, the butter price equalization scheme has continued to operate by voluntary action based on the agreements between the manufacturers and the Commonwealth Dairy Produce Equalization Committee Limited. The Committee, which comprises members of the State Dairy Products Boards and other persons representing the industry, enters into agreements with manufacturers to secure to them equal rates from sales of butter and cheese, and for this purpose may fix basic prices at which these products sold in Australia or abroad are to be taken into account. The effect is that local and export trade are distributed in equitable proportions among the manufacturers by means of quotas. The Committee fixes basic prices and equalizes returns to factories through an Equalization Fund. The States originally participating in the scheme were New South Wales, Victoria, Queensland and Tasmania in respect of both butter and cheese, and South Australia in respect of cheese. South Australia and Western Australia entered the scheme in respect of butter on 1st April, 1946, and Western Australia extended its participation to include cheese in January, 1947.

Details are given in para. 15 on page 972 of the returns realized on local and oversea sales and of the average equalization rate for the years ended June, 1954 to 1959. Details are also given in para. 12 of the wholesale prices of butter and cheese for home consumption as fixed by State Prices Authorities or as determined by the Dairy Produce Equalization Committee.

11. **Casein Equalization Scheme.** Following upon action taken in September, 1951, to include control of exports of casein in the powers of the Australian Dairy Produce Board, that body decided that the most equitable method of allocating permits for exports of casein was to ensure that the recipient was a party to an approved equalization scheme. Agreements were completed with all known manufacturers and the equalization of casein sales under this scheme commenced in January, 1952. The scheme is operated by the Commonwealth Dairy Produce Equalization Committee Ltd. A Casein Equalization Advisory Committee was appointed to consider matters relevant to the operation of the plan and to make recommendations to the operating company.

Average realizations under the scheme in 1953–54 were 162s. 4.3d. per cwt., 1954–55, 166s. 5.2d. per cwt., 1955–56, 180s. 9.9d. per cwt. and 1956–57, 184s. 6.6d. per cwt. An interim equalization value of 180s. 0d. per cwt. was fixed for 1957–58.

Prior to the operation of this scheme another plan had been operated by the Casein Equalization Committee from July, 1946, to September, 1949.

12. **Wholesale Prices of Butter and Cheese in Australia.**—Since 20th September, 1948, when the Commonwealth Government ceased to exercise price control, the fixation of the wholesale prices of butter and cheese has been a matter for State Prices Authorities. At present, however, the power to fix prices is being exercised in only two States, Queensland and South Australia, the prices in all other States being determined by the Commonwealth Dairy Produce Equalization Committee Ltd. Details of prices operating in each of the States since 1st July, 1952, are shown in the following table.

## WHOLESALE PRICES OF BUTTER AND CHEESE, AUSTRALIA.(a)

(s.d. per cwt.—Australian currency.)

Date from which Prices became Effective.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
<b>BUTTER.</b>						
1st July, 1952 .. ..	417 8	417 8	417 8	417 8	422 4	417 8
26th July, 1955 .. ..	452 8	452 8	451 6	450 4	452 8	452 8
1st July, 1956 .. ..	466 8	466 8	465 6	464 4	466 8	466 8
1st July, 1958 .. ..	485 4	485 4	484 2	484 2	485 4	485 4
<b>CHEESE.</b>						
1st July, 1952 .. ..	256 8	256 8	256 8	256 8	256 8	256 8
26th July, 1955 .. ..	275 4	275 4	275 4	274 2	275 4	275 4
1st July, 1956 .. ..	282 4	282 4	282 4	281 2	282 4	282 4
1st July, 1958 .. ..	291 8	291 8	291 8	291 8	291 8	291 8

(a) Maximum prices fixed by State Prices Authorities or as determined by the Commonwealth Dairy Produce Equalization Committee Ltd., for choicest grade bulk butter and cheese.

13. **Marketing of Dairy Products.**—(i) *The Dairy Produce Export Control Act 1924–1954.* Introduced at the request of the dairying industry, this Act was passed by the Commonwealth Parliament with the object of organizing the oversea marketing of Australian dairy produce. A Dairy Produce Control Board was appointed and was in existence from 1924 to 1935. In the course of its functions, the Board regulated shipments to ensure regularity of supply in the London market, controlled forward selling, obtained reductions in oversea freights and insurance rates and participated in an advertising campaign in the United Kingdom.

Prior to the appointment of the Dairy Produce Control Board, a voluntary body—the Australian Dairy Council—was established to advise and make recommendations to the Governments on problems connected with the production, manufacture and quality of dairy produce, pasture improvements and diseases of dairy cattle.

Following a recommendation by the Australian Agricultural Council, the functions of these bodies were combined by an amending Act of 1935 under the Australian Dairy Produce Board and provision was made for the allocation of money from the Board's funds for research and investigation into pastures, diseases of dairy cattle and the quality of butter. The functions of the Board were later extended to enable it to advise the Government in connexion with the transport of dairy produce, the securing of new markets, the expansion of existing markets and other matters.

The Australian Dairy Produce Board was re-constituted in 1947 by an amendment to the Dairy Produce Export Control Act, its membership being reduced from seventeen to twelve. The functions of the Board were extended to enable it to purchase and sell, on behalf of the Commonwealth, dairy produce intended for export, and to control all matters concerning the handling, storage, protection, treatment, transfer and shipment of the produce so purchased or sold. In 1953, the direct farmer representation on the Board was increased from two to three members, thus raising the total membership from twelve to thirteen.

In April, 1954, the Act was further amended to prepare for the implementation of an export marketing plan to follow the expiration of the United Kingdom–Australia Butter and Cheese Contract. The amendment enabled the Board to purchase dairy produce intended for export to the United Kingdom and to sell such produce on behalf of the dairying industry in lieu of its present function of selling on behalf of the Commonwealth Government. In the interests of the stability of the industry, the Act provides that the Board may be the sole Australian exporter of butter and cheese to the United Kingdom.

(ii) *The Dairy Produce Export Charges Act 1924–1937.* This Act provides for the imposition of a levy on all butter and cheese exported from Australia to cover the administrative expenses of the Board and for advertising and other purposes. The rate of the levy is fixed by regulation.

(iii) *Butter and Cheese Contracts.* Details of the war-time contracts arranged between the United Kingdom and Australian Governments, whereby the former undertook to purchase Australia's surplus butter and cheese, were shown on pages 985 and 986 of Official Year Book No. 37. The purchase of butter and cheese from 1944-45 to 1954-55 was covered by the Long-Term Purchase Agreement. Details of this Agreement and of the prices paid for various grades of butter and cheese each year under the Agreement were given in pages 943 and 944 of Official Year Book No. 42 and in earlier issues.

14. *Commonwealth Subsidies and Stabilization Plans.*—(i) *Butter, Cheese and Processed Milk Products.* Under the provisions of the various Dairy Industry Assistance Acts, the first of which was passed in 1942, the Commonwealth Government has provided subsidies on milk supplied for the manufacture of butter, cheese and processed milk products. Subsidies were paid on a seasonal basis prior to 1st April, 1946, but from that date have been on a flat rate basis. Subsidies are distributed by the Commonwealth Dairy Produce Equalization Committee Limited through factories to milk producers by payments on butter, cheese and processed milk products manufactured. Subsidy on milk supplied for the manufacture of processed milk products was discontinued from 1st July, 1948, to 30th June, 1949, and again from 1st July, 1952.

The first of two five-year stabilization plans came into operation on 1st July, 1952. Under this plan, the Commonwealth Government, with the approval of the States, determined the ex-factory prices of butter and cheese, guaranteed to dairy farmers a return, based upon costs of efficient production, in respect of quantities of butter and cheese sold within the Commonwealth, plus an additional 20 per cent. (if produced), and agreed to make available an amount by way of subsidy to lift the return on that part of output covered by the guarantee, to the guaranteed level. The second five-year stabilization plan which came into operation on 1st July, 1957, continued all the important features of the first plan. A new feature, however, was that any subsidy made available under the scheme should be on the basis of a fixed amount in any dairying year.

The actual amount of subsidy paid by the Commonwealth Government was in excess of its original commitment in 1955-56, when, to assist in offsetting a fall in export returns, the Government agreed to increase subsidy payments to a fixed figure of £14,500,000. In 1956-57 and 1957-58, a fixed amount of £13,500,000 was provided.

Following representations by industry organizations, the Commonwealth Government established the Joint Dairy Industry Advisory Committee in November, 1946, comprising a chairman nominated by the Government, four representatives of Commonwealth Government Departments and four industry representatives from the several States. The Committee's functions, broadly, were to advise and assist in conducting cost and other surveys of dairy farm production and to act as an advisory body to the Government in these matters. From 1st April, 1947, to 30th June, 1952, the rates of overall return to milk producers determined by the Commonwealth Government for the purpose of subsidy payments were based on recommendations made by the Committee following surveys of production costs in the dairy industry.

Early in 1953, the Dairy Industry Investigation Committee, an independent body consisting of three members, was appointed to advise the Commonwealth Government on the guaranteed return to producers during 1953-54. The Committee was re-established in March, 1954, to advise the Government on the guaranteed return for each year of the remaining three year period of the Stabilization Plan. For the current five year plan, the Committee has been re-appointed to determine the cost of efficient production of butter-fat only.

Amounts realized on exports of butter and cheese in excess of the f.o.b. equivalent of the guaranteed return have been credited to the Dairying Industry Stabilization Fund, which was established in July, 1948, for the purpose of stabilizing returns from exports. During 1951-52, the Stabilization Fund met the deficiency in respect of all exports which did not return sufficient to meet the basic return to the factory. From 1st July, 1952, to 30th June, 1957, it was available to the industry to be used, in whatever manner considered desirable by it, to make good any deficiency in respect of all exports other than the 20 per cent. provided for under the Commonwealth Government's Five-year Stabilization Plan. The Act was amended in 1957 to enable the Board to use the fund for such other purposes as are approved by the Minister for Primary Industry. After allowing for outstanding debits, the amount standing to the credit of the Dairying Industry Stabilization Fund at 30th June, 1958, totalled approximately £1,509,000.

(ii) *Whole Milk.* In addition to the subsidies referred to above, the Commonwealth Government subsidized the production of whole milk consumed directly from 1943-44 to 1948-49. Details of the amounts distributed during each year will be found in Official Year Book No. 38, page 1031.

15. **Average Returns from Butter and Cheese Sold and Assessed Farm Production Costs.**—The first of the two tables following shows in respect of butter and cheese, particulars of the rates realized on local, interstate and overseas sales and the average equalization and subsidy rates in operation for the years ended June, 1954 to 1958. The second table shows the distribution between factory and farm of the overall return to manufacturers for butter. The assessed farm production cost for commercial butter is also shown for comparison with the average returns to dairy farmers.

**BUTTER AND CHEESE: RATES REALIZED ON SALES, AVERAGE EQUALIZATION RATES AND RATES OF COMMONWEALTH SUBSIDY UNDER DAIRY INDUSTRY ASSISTANCE ACTS.**

(Rates s. d. per cwt.)

Year ended 30th June.	Rates Realized on Sales.			Average Equalization Rate.	Rate of Subsidy.	Rate of Overall Return to Manu- facturers.
	Local.	Interstate.	Overseas.			
<b>BUTTER.</b>						
1954 .. ..	404 7.3	380 4.0	401 4.6	400 5.1	89 10.3	490 3.4
1955 .. ..	403 4.2	384 1.1	386 3.8	395 10.3	79 0.0	474 10.3
1956 .. ..	438 1.5	419 7.3	353 0.2	400 10.5	65 1.0	465 11.5
1957 .. ..	453 5.1	425 4.9	298 6.7	392 6.6	65 7.8	458 2.4
1958 .. ..	(a)	(a)	(a)	b365 4.0	71 7.8	b436 11.8
<b>CHEESE.</b>						
1954 .. ..	244 8.6	209 11.1	232 4.7	32 0.0	264 4.7	
1955 .. ..	246 3.1	191 11.1	220 2.3	29 10.9	250 1.2	
1956 .. ..	264 0.1	259 9.5	262 4.1	31 5.7	293 9.8	
1957 .. ..	267 11.2	166 8.4	223 11.9	26 2.6	250 2.5	
1958 .. ..	(a)	(a)	b212 8.0	35 11.2	b248 7.2	

(a) Not yet available. (b) Rates are of an interim nature only.

(Source: Commonwealth Dairy Produce Equalization Committee Limited.)

**COMMERCIAL BUTTER: OVERALL RETURNS AND ASSESSED FARM PRODUCTION COSTS.**  
(Pence per lb.)

Year ended 30th June.	Average Overall Returns on Commercial Butter.			Assessed Farm Production Cost:(a)
	Rate of Overall Return to Manufacturer.	Manufacturing Cost.	Return to Dairy Farmer.	
1954.. ..	52.530	4.653	47.877	49.29
1955.. ..	50.878	4.253	46.625	49.29
1956.. ..	49.924	4.626	45.298	49.29
1957.. ..	49.093	4.626	44.467	51.00
1958.. ..	(b) 46.820	4.626	(b) 42.194	51.00

(a) Up to 1956-57 the figures shown are the guaranteed returns as recommended by the Dairy Industry Investigation Committee and accepted by the Commonwealth Government; from 1957-58 they represent the cost of production as found by the Dairy Industry Investigation Committee. (b) Rates are of an interim nature only.

16. **Dairy Industry Extension Grant.**—An annual grant of £250,000, to be expended by State Governments for the purpose of promoting improved farming practices in the dairying industry, was first made by the Commonwealth Government for the five years from 1st July, 1948. This assistance was continued by the Commonwealth Government for a further period of five years from 1st July, 1953, again by means of annual grants of £250,000.

17. **Dairy Industry Research and Sales Promotion.**—At the request of the Australian Dairy Industry Council, legislation was enacted in 1958 to provide for a sales promotion campaign for butter and cheese in Australia and also for research into industry problems.

The legislation provides for a statutory levy to be imposed on all butter and cheese manufactured in Australia. The maximum rates of levy are  $\frac{3}{10}$  d. per lb. on butter and  $\frac{3}{10}$  d. per lb. on cheese but the initial rates which commenced in November, 1958, are  $\frac{1}{4}$  d. per lb. on butter and  $\frac{1}{8}$  d. per lb. on cheese. The proceeds from the levy are divided equally between research and sales promotion.

The Commonwealth Government agreed to contribute one half of the costs incurred on approved projects included in the programme of research, with a maximum contribution of £1 for £1 against funds raised by way of levy and allocated to research. The sales promotion programme is financed solely by the levy.

The scheme is administered by the Australian Dairy Produce Board, which, in respect of research, is advised by a statutory committee—the Dairy Produce Research Committee.

18. *Oversea Trade in Butter, Cheese and Milk.*—(i) *General.* The production of butter and cheese in Australia is considerably in excess of local requirements and consequently a substantial surplus is available for export overseas. In normal circumstances, the extent of this surplus is chiefly dependent upon seasonal conditions. Exports of butter, which averaged 90,000 tons in the three years prior to the 1939–45 War, were maintained to a certain extent during the war and post-war years by the restriction of supplies for local consumption, but because of lower production they nevertheless fell as low as 41,800 tons in 1944–45. In the last year of rationing, 1949–50, exports were 79,200 tons, but they fell to 11,300 tons by 1951–52. There was a substantial increase in exports in subsequent years and in 1957–58, 50,794 tons were shipped. In addition, small quantities of butter concentrate and ghee have been exported during the post-war period. Exports of cheese, which averaged 11,500 tons pre-war, rose to a maximum of 26,000 tons in 1948–49, but they subsequently fell and in 1957–58 amounted to 9,230 tons.

During 1938–39, 96,900 tons of butter (95 per cent. of all butter exported) were shipped to the United Kingdom. With the decline in total exports, there was also a substantial reduction in the proportion shipped to the United Kingdom up till 1954–55. This increased again to 72,400 tons (88 per cent.) in 1955–56 but there was a slight decline again in 1956–57 to 62,553 tons (82 per cent. of the total butter exports) and a further decline to 41,509 tons (82 per cent. of the total butter exports) in 1957–58.

In 1938–39, exports of cheese totalled 16,000 tons of which 15,500 tons or 97 per cent. were exported to the United Kingdom. Of the total of 9,230 tons exported in 1957–58, 5,793 tons or 62 per cent. were shipped to the United Kingdom.

Total quantities and values of exports of Australian origin of butter, cheese and condensed, concentrated, etc., milk and cream are shown on page 980.

(ii) *Butter and Cheese Exports graded according to Quality.* All butter and cheese exported comes under the provisions of the Exports (Dairy Produce) Regulations and is subject to the supervision, inspection and examination of officers appointed for that purpose. These commodities are graded according to quality which has been fixed by regulation as follows:—Flavour and aroma, 50 points, texture, 30 points, and condition, 20 points. Butter and cheese graded at 93 to 100 points is of choicest quality, at 90 to 92 points, first quality, at 86 to 89 points, second quality, and at 80 to 85 points, pastry or cooking quality or, in the case of cheese, third quality.

In the following table, particulars are given of the relative proportions of butter and cheese graded for export according to quality. Further details, which include actual quantities by States, are to be found in *Primary Industries, Part I.—Rural Industries, 1956–57, Bulletin No. 51.*

**BULK BUTTER AND CHEESE GRADED FOR EXPORT: AUSTRALIA.**  
(Per Cent.)

Grade.	Butter.			Cheese.		
	1955–56.	1956–57.	1957–58.	1955–56.	1956–57.	1957–58.
Choicest .. ..	55.0	56.8	61.0	12.7	11.7	11.8
First Quality .. ..	34.3	32.9	28.2	74.1	70.9	72.0
Second Quality .. ..	7.9	7.7	8.1	13.2	17.4	16.2
Third Quality(a) .. ..	2.8	2.6	2.7	(b)	(b)	(b)
Total .. ..	100.0	100.0	100.0	100.0	100.0	100.0

(a) Includes rejected.

(b) Included with Second Quality.

## § 4. Pigs and Pig Products.

1. **Pigs.**—The number of pigs in Australia first reached a million in 1905. It fluctuated about this level up to 1940, when it reached 1,455,341, while in 1941 the record number of 1,797,340 was recorded. There was a decline in the following two years but the numbers rose again to 1,746,721 in 1944; thereafter, there was an almost continuous decline until 1953 when the number of pigs was only 992,532. Numbers increased in succeeding years and, despite a set-back in 1956, they rose to 1,422,565 in 1958. Details of the number of pigs in each State and Territory for each of the five years 1954 to 1958, together with the average for the five years 1935 to 1939, are given in the following table:—

NUMBER OF PIGS.

As at 31st March.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	N.T.(a)	A.C.T.	Australia.
Average, 1935 to 1939(b) ..	391,874	287,140	294,777	80,548	83,999	42,772	479	544	1,182,133
1954 ..	371,608	232,384	384,453	60,619	100,912	46,256	1,132	276	1,197,640
1955 ..	375,019	263,666	406,879	84,502	107,039	58,382	911	104	1,296,502
1956 ..	343,030	227,223	372,871	72,920	99,097	49,498	1,076	115	1,165,830
1957 ..	386,789	258,336	394,518	92,180	139,982	52,358	755	139	1,325,057
1958 ..	397,011	278,628	422,713	108,343	150,783	62,595	2,325	167	1,422,565

(a) As at 1st January. (b) As at 31st March for New South Wales and Australian Capital Territory; 1st March for Victoria; 1st January for Queensland, South Australia, Western Australia and Tasmania.

Further details relating to pig numbers are given in Chapter XXIII.—Pastoral Production. Maps showing the distribution of pigs in Australia at 31st March, 1955 and 1948 appeared on page 912 of Official Year Book No. 43 and on page 908 of Official Year Book No. 39, respectively.

2. **Size of Pig Herds.**—A series of special tabulations relating to rural holdings undertaken for all States for the year 1955–56 covered, *inter alia*, a classification of holdings by size of pig herd and by area of holding, area of wheat grown for grain, and size of dairy cattle herd. The tabulations have been published in full detail in a series of mimeographed bulletins, *Size Classification of Rural Holdings, 1955–56*, and also appear in summarized form in *Primary Industries, Part I.—Rural Industries, 1956–57*, Bulletin No. 51.

3. **Pigs Slaughtered.**—The number of pigs slaughtered during each of the years 1953–54 to 1957–58 and the average for the years 1934–35 to 1938–39 are shown in the following table:—

## PIGS SLAUGHTERED.

('000.)

Year.	Slaughtering Passed for Human Consumption.							Total Slaughtering (including Boiled Down).
	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia. (a)	
Average, 1934–35 to 1938–39 ..	555	484	525	154	119	61	1,899	1,912
1953–54 ..	492	298	461	104	115	59	1,534	1,545
1954–55 ..	615	422	499	136	182	79	1,939	1,951
1955–56 ..	576	395	459	132	160	88	1,817	1,828
1956–57 ..	541	382	438	124	157	82	1,730	1,740
1957–58(b) ..	614	463	455	169	216	90	2,014	2,024

(a) Including Australian Capital Territory and Northern Territory.

(b) Subject to revision.

4. **Pork.**—(i) *Production.* In the following table, details of the production of pork in each State are shown for the years 1953–54 to 1957–58 compared with average production during the years 1934–35 to 1938–39.

**PRODUCTION OF PORK (BONE-IN WEIGHT).**  
(Tons.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
Average, 1934-35 to 1938-39 ..	9,938	12,236	9,867	3,215	1,741	1,240	7	38	38,282
1953-54 ..	12,949	7,332	7,216	2,253	2,032	1,399	69	146	33,396
1954-55 ..	17,026	11,078	8,948	3,521	4,362	2,027	65	192	47,219
1955-56 ..	14,952	10,709	8,016	3,247	3,529	2,215	67	204	42,939
1956-57 ..	14,840	10,676	6,734	2,724	3,322	2,093	59	200	40,648
1957-58(a) ..	16,751	12,946	7,709	3,650	4,508	2,366	65	200	48,195

(a) Subject to revision.

(ii) *Consumption.* As in the case of other meats, pork was subject to rationing during the 1939-45 War and immediate post-war years and consumption was at a much lower level than pre-war. In 1954-55, consumption reached 10.2 lb., only slightly below the immediate pre-war average, but fell during each of the two following years to 8.6 lb. per head in 1956-57. Consumption in 1957-58 rose to 9.9 lb. per head, a figure which has only once been exceeded in post-war years. In the following table, details of the production and disposal of pork are shown for the years 1953-54 to 1957-58 compared with averages for the three years 1936-37 to 1938-39.

**PRODUCTION AND DISPOSAL OF PORK (BONE-IN WEIGHT) : AUSTRALIA.**

Year.	Changes in Stock.	Production. (a)	Exports.	Canning.	Consumption in Australia.	
					Total.	Per Head per annum.
	'000 tons.	'000 tons.	'000 tons.	'000 tons.	'000 tons.	lb.
Average, 1936-37 to 1938-39 ..	..	45.5	13.7	..	31.8	10.4
1953-54 ..	-1.1	33.4	1.2	2.8	30.5	7.7
1954-55 ..	-0.5	47.2	2.9	3.4	41.4	10.2
1955-56 ..	-0.7	42.9	1.1	2.2	40.3	9.7
1956-57 ..	+0.9	40.7	0.6	2.4	36.8	8.6
1957-58(b) ..	+0.8	48.2	1.0	3.4	43.0	9.9

(a) Includes an estimate of trimmings from baconer carcasses.

(b) Subject to revision.

5. *Bacon and Ham.*—(i) *Production.* As in the case of pork, the increased demand for bacon and ham during the 1939-45 War stimulated production to a level not previously attained. Production reached its peak in 1944-45 when 56,246 tons of bacon and ham were cured. This was followed by a decline in output in each succeeding year to 36,628 tons in 1951-52. Production has been maintained at about this level in subsequent years, 36,400 tons being recorded in 1957-58. Details of production are shown by States in the following table for each year 1953-54 to 1957-58 compared with the average production for the five pre-war years ended 1938-39.

**PRODUCTION OF BACON AND HAM (CURED WEIGHT).(a)**  
(Tons.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia
Average, 1934-35 to 1938-39 ..	9,963	7,614	9,269	2,950	2,013	970	1	32,780
1953-54 ..	11,875	7,044	10,655	3,024	3,443	949	..	36,990
1954-55 ..	11,769	8,074	10,807	3,378	3,316	1,027	..	38,371
1955-56 ..	11,463	7,929	10,224	3,587	3,231	1,040	..	37,474
1956-57 ..	10,322	7,721	9,901	3,415	3,054	917	..	35,330
1957-58(b) ..	11,361	8,285	9,645	3,296	2,949	864	..	36,400

(a) Pressed and canned bacon and ham have been converted to bone-in weight, except in pre-war years.

(b) Subject to revision.

(ii) *Consumption.* Consumption per head declined in the early stages of the 1939-45 War from the pre-war average of 10.2 lb. per annum, but subsequently increased to 12.7 lb. in 1946-47. A decline to a relatively steady level of from 7 lb. to 8 lb. per head per annum followed. In 1957-58, consumption amounted to 6.9 lb. per head. Details of production and disposal of bacon and ham for the years 1953-54 to 1957-58 compared with average production and disposal for the period 1936-37 to 1938-39 are shown in the following table.

**PRODUCTION AND DISPOSAL OF BACON AND HAM (CURED WEIGHT)(a)  
AUSTRALIA.**

Year.	Changes in Stock.	Production.	Exports.	Canning.	Consumption in Australia.	
					Total.	Per Head per annum.
	'000 tons.	'000 tons.	'000 tons.	'000 tons.	'000 tons.	lb.
Average, 1936-37 to 1938-39 .. .. .	(b)	32.5	1.0	..	31.5	10.2
1953-54 .. .. .	+0.4	37.0	1.6	6.5	28.5	7.2
1954-55 .. .. .	-0.2	38.4	1.0	5.4	32.2	7.9
1955-56 .. .. .	+0.4	37.5	0.7	5.1	31.3	7.5
1956-57 .. .. .	+0.3	35.3	0.5	4.8	29.7	7.0
1957-58(c) .. .. .	-0.2	36.4	0.5	6.1	30.0	6.9

(a) Pressed and canned bacon and ham have been converted to bone-in weight, except in pre-war years. (b) Not available. (c) Subject to revision.

6. **United Kingdom Contracts.**—Details relating to the several war-time contracts and the more recent Long-term Purchase Agreement between the Governments of the Commonwealth and the United Kingdom for the sale of Australia's surplus production of meats (including pigmeats) are included in Chapter XXIII.—Pastoral Production.

7. **Oversea Trade in Pigs and Pig Products.**—Total quantities and values of exports of Australian origin of pigs and pig products (bacon and ham, lard and frozen pork) for the years 1955-56 to 1957-58 are shown on page 980.

### § 5. Poultry-farming.

1. **General.**—Poultry-farming has been carried on in Australia for many years and the State Departments of Agriculture have encouraged its development by appointing experts to advise on the care and management of poultry and by conducting egg-laying competitions. Originally the industry was conducted in conjunction with other branches of rural activity, mainly dairying, but it is now a specialized and distinct industry and it is from this source that the bulk of the commercial production is obtained. Practically all farms keep poultry for the purpose of supplying their own domestic requirements and in many cases some supplies from this source are also marketed. In addition, many private homes keep small numbers of fowls in backyard runs and this helps to maintain domestic needs, particularly when eggs are in short supply.

2. **Numbers of Poultry.**—In pre-war years, the numbers of the principal kinds of poultry were a normal feature of the annual census of livestock in all States except Victoria and Tasmania. These data were collected on a restricted scale by all States in 1942-43, the details obtained being confined to farms of one acre or more producing eggs or poultry for sale. The collection has since been discontinued in some States. Because of their incompleteness, details of poultry numbers are not published.

3. **Recorded Production and Disposal of Eggs.**—(i) *Shell Eggs.* Available statistics of the production and disposal of eggs in Australia are restricted to those recorded by the Egg Boards of the several States. As Boards were not set up in all States until 1943, comparable statistics of recorded production of eggs for Australia as a whole are not available prior to 1943-44. Details of production in the respective States as recorded by these authorities for the years 1953-54 to 1957-58 are shown in the following table:—

**SHELL EGGS : PRODUCTION(a) RECORDED BY EGG BOARDS.  
(’000 Dozen.)**

State.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
New South Wales .. .. .	51,884	55,057	51,635	52,334	49,168
Victoria .. .. .	25,306	26,377	24,985	24,874	25,956
Queensland .. .. .	8,555	8,312	7,848	8,848	7,894
South Australia .. .. .	12,040	12,359	11,820	11,375	11,219
Western Australia .. .. .	9,283	8,909	7,687	8,589	8,602
Tasmania .. .. .	934	889	943	912	(b)
<b>Total .. .. .</b>	<b>108,002</b>	<b>111,903</b>	<b>104,918</b>	<b>106,932</b>	<b>(c) 102,839</b>

(a) Recivals from consignors and sales by producer agents. (b) Not available. (c) Excludes Tasmania.

(ii) *Egg Pulp.* Prior to the 1939-45 War, production of egg pulp was about 7 million lb. per annum. This was used almost entirely for the manufacture of cakes, pastry and biscuits, only negligible quantities being exported. Production was expanded greatly during the war years to meet the requirements of the Armed Services and has since been maintained at a high level for export purposes and to meet increased local requirements.

Particulars of the production of whole egg pulp as recorded by the Egg Boards in the several States are shown in the following table.

**LIQUID WHOLE EGG : PRODUCTION RECORDED BY EGG BOARDS.**  
(\*000 lb.)

State.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
New South Wales .. ..	20,942	17,057	14,649	18,755	13,198
Victoria .. ..	8,295	6,564	6,879	6,245	6,591
Queensland .. ..	3,703	2,419	2,901	3,302	1,658
South Australia .. ..	8,178	6,516	5,991	4,501	4,461
Western Australia .. ..	3,894	1,924	1,532	2,024	2,855
Tasmania .. ..	239	246	236	133	(a)
<b>Total .. ..</b>	<b>45,251</b>	<b>34,726</b>	<b>32,188</b>	<b>34,960</b>	<b>(b) 28,763</b>

(a) Not available.

(b) Excludes Tasmania.

In addition to liquid whole egg, production was also recorded of liquid egg whites and liquid egg yolks. Output in 1957-58 amounted to 513,927 lb. and 354,896 lb. respectively, compared with 571,184 lb. and 360,837 lb. respectively in the previous year. Output in 1957-58 excludes production for Tasmania which amounted to 4,084 lb. in 1956-57.

(iii) *Egg Powder.* The production of dried egg powder was established in Australia in 1942, to treat Australia's surplus eggs so as to maintain exports under war-time conditions to the United Kingdom. Production was continued after the end of the war for export purposes, but since 1946-47 has declined to negligible proportions.

4. **Production and Consumption of Eggs.**—Statistics of total egg production must necessarily be accepted with some reserve. The production shown in the following table together with details of exports and consumption is based upon the records of Egg Boards of production from areas under their control plus estimates of production from uncontrolled areas and from "back-yard" poultry-keepers.

**ESTIMATED PRODUCTION AND DISPOSAL OF EGGS IN SHELL(a) :**  
**AUSTRALIA.**

Year.	Changes in Stock.	Estimated Total Production.	Exports.	For Drying and Pulping.(b)	Consumption in Australia as Human Food.	
					Total.	Per Head per Annum.
	'000 tons.	'000 tons.	'000 tons.	'000 tons.	'000 tons.	lb.
Average, 1936-37 to 1938-39 .. ..	(c)	89.5	7.6	3.2	78.7	25.7
1953-54 .. ..	+0.2	111.8	7.9	21.0	82.7	20.8
1954-55 .. ..	-0.2	115.4	12.2	17.5	85.9	21.2
1955-56 .. ..	..	113.2	9.9	15.4	87.9	21.1
1956-57 .. ..	+0.9	115.8	6.3	16.9	91.7	21.5
1957-58 .. ..	-0.7	111.8	7.3	13.9	91.3	21.0

(a) The average weight of an egg in Australia is taken as 1.75 oz.

(b) Includes wastage.

(c) Not available.

Details of the consumption of shell eggs, liquid whole egg and total shell egg equivalent (expressed in lb. and in number of eggs) per head of population per annum are shown in the following table.

SUPPLIES OF EGGS AND EGG PRODUCTS<sup>(a)</sup> MOVING INTO CONSUMPTION:  
AUSTRALIA.

(Per Head per Annum.)

Commodity.	Average, 1936-37 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Shell Eggs .. .. lb.	25.7	20.8	21.2	21.1	21.5	21.0
Liquid Whole Egg and Egg Powder <sup>(a)</sup> .. .. lb.	0.9	1.5	1.6	1.3	1.5	1.2
Total .. { lb.	26.6	22.3	22.8	22.4	23.0	22.2
Number <sup>(b)</sup>	243	204	209	205	210	203

<sup>(a)</sup> In terms of weight of shell eggs.  
1.75 oz.<sup>(b)</sup> The average weight of an egg in Australia is taken as

5. Marketing of Eggs.—(i) *United Kingdom Market.* Details of the annual contracts entered into between the United Kingdom and Australian Governments up to 1952-53 and of the results of trading under free market conditions in the four years following appear in earlier issues of the Official Year Book.

In 1957-58, exports of shell eggs to the United Kingdom were at a much lower level than the previous year although unit returns were higher. Approximately 6,700 tons of egg pulp were shipped and sold on the open market. The price received for this on an f.o.b. basis averaged approximately £196 sterling per ton.

(ii) *Other Markets.* West Germany has been the second largest importer of Australian shell eggs in recent years and in 1957-58 exports to this country increased substantially. Singapore has also been an important market for Australian eggs.

(iii) *Egg Export Control Act 1947.* Following the termination of Commonwealth control over the production and marketing of eggs on 31st December, 1947, functions relating to the local marketing of eggs reverted to State Egg Boards, which became responsible for stabilizing prices and marketing of eggs produced in the respective States. In order to assist in marketing Australia's surplus production of eggs under the Long-term Purchase Agreement with the United Kingdom, the Commonwealth established the Australian Egg Board under the Egg Export Control Act 1947. The Board, which commenced to operate on 1st January, 1948, was empowered to buy and sell, on behalf of the Commonwealth Government, eggs and egg products intended for export which comply with the provisions of the Export (Dairy Produce) Regulations. In addition, the Board was authorized to deal with all matters relating to the export of eggs and egg products from Australia, to make such experiments as are likely to lead to the improvement of the quality of Australian eggs and to promote their sale overseas. The Board consisted of ten members, including six representatives of egg producers and one representative of the Commonwealth Government.

Due to the discontinuance of inter-Governmental trading in eggs and egg products, the Egg Export Control Act was amended in April, 1954, to provide for the reconstruction of the Australian Egg Board and the implementation of an egg export marketing scheme. The new Board, established on 17th June, 1954, comprises nine members including a representative of the Commonwealth Government and representatives from each State Egg Marketing Board (except Tasmania). The Board is empowered to act as a trading authority selling eggs and egg pulp as agent for State Egg Boards. However, any State Board desiring to export on its own account may do so, subject to general terms and conditions as laid down by the Australian Egg Board.

6. *Overseas Trade in Poultry Products.*—The Australian overseas export of poultry products has been confined in the past chiefly to eggs in shell and egg contents, which are consigned mainly to the United Kingdom. In 1949-50, exports of eggs in shell reached the record level of 23 million dozen. Shipments were at a lower level in subsequent years and, in 1957-58, 11.8 million dozen were exported.

Prior to the 1939-45 War, exports of egg contents were small and in 1939-40 there was an excess of imports. During the war years, exports expanded greatly, mainly to meet Service requirements, and after the close of the war there was a further expansion to 37.9 million lb. of egg contents in 1953-54. There was a decline in subsequent years and, in 1957-58, 17.9 million lb. were exported.

Since the close of the war, there has also been a considerable increase in the exports of frozen poultry. Exports, which amounted to 0.6 million lb. in 1957-58, were, however, much lower than in preceding years.

Total quantities and values of exports of Australian origin of poultry products (live poultry, frozen poultry, eggs in shell, egg pulp and powder) for the years 1955-56 to 1957-58, are shown on page 980.

### § 6. Bee-farming.

1. **Production of Honey and Bees-wax.**—Although practised as a separate industry, bee-farming is also carried on in conjunction with other branches of farming, but its place in Australia's rural economy is not very significant. The returns of honey from productive hives during 1957-58 showed an average of 104 lb. per hive and the average quantity of wax was 1.4 lb. per productive hive.

The number of hives and the production of honey and bees-wax during the year 1957-58 are shown in the following table.

**BEEHIVES, HONEY AND BEES-WAX, 1957-58.**

State or Territory.	Beehives.			Honey Produced.		Bees-wax Produced.	
	Pro- ductive.	Unpro- ductive.	Total.	Quantity.	Gross Value.	Quantity.	Gross Value.
	'000.	'000.	'000.	'000 lb.	£'000.	'000 lb.	£'000.
New South Wales ..	120	50	170	13,029	814	165	48
Victoria ..	73	31	104	5,884	429	67	21
Queensland ..	22	14	36	1,365	74	25	7
South Australia ..	56	28	84	4,151	195	86	20
Western Australia ..	35	6	41	7,313	246	87	17
Tasmania ..	4	2	6	481	32	5	2
Aust. Cap. Territory ..	1	..	1	55	3	1	..
<b>Australia ..</b>	<b>311</b>	<b>131</b>	<b>442</b>	<b>32,278</b>	<b>1,793</b>	<b>436</b>	<b>115</b>

The production of honey and bees-wax fluctuates considerably and is determined mainly by the flow of nectar from flora, particularly the eucalypts, which varies greatly from year to year. In recent years, there has been a pronounced upward trend in the output of honey, the 1948-49 figure, 53,200,000 lb., being an all-time record. Production in 1957-58 at 32,278,000 lb., although lower than in 1948-49, was still higher than pre-war.

The table hereunder shows the production of honey and bees-wax for the five years ended 1957-58 in comparison with the averages for the years 1934-35 to 1938-39.

### HONEY AND BEES-WAX PRODUCTION.

('000 lb.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus- tralia.
<b>HONEY.</b>							
Average, 1934-35 to 1938-39 ..	3,827	3,600	689	3,388	1,125	181	(a) 12,810
1953-54 ..	10,381	9,382	2,888	6,378	6,325	365	(b) 35,737
1954-55 ..	16,411	8,834	1,732	3,671	2,721	243	(b) 33,633
1955-56 ..	15,207	7,010	2,329	5,115	4,482	302	(b) 34,464
1956-57 ..	14,946	8,210	3,075	8,169	5,650	372	(b) 40,458
1957-58 ..	13,029	5,884	1,365	4,151	7,313	481	(b) 32,278
<b>BEES-WAX.</b>							
Average, 1934-35 to 1938-39 ..	56	42	10	41	19	2	(a) 170
1953-54 ..	123	101	43	78	73	4	(b) 422
1954-55 ..	194	94	37	60	52	4	(b) 441
1955-56 ..	184	78	34	70	57	4	(b) 427
1956-57 ..	188	90	42	116	70	5	(b) 511
1957-58 ..	165	67	25	86	87	5	(b)(c) 436

(a) Excludes the Australian Capital Territory and the Northern Territory.

(c) Includes the Australian Capital Territory.

(b) Excludes the Northern Territory.

2. **Oversea Trade in Bee Products.**—Prior to the 1939–45 War, the production of honey exceeded Australian requirements and a small quantity was available for export. In 1948–49, the record quantity of 32.1 million lb., was exported. Exports amounted to 12.8 million lb. in 1956–57 and 19.6 million lb. in 1957–58.

The wider use of frame hives has reduced the production of wax, and as a result, the quantity of bees-wax imported generally exceeded that exported up to 1945–46. During each year since 1946–47, however, with the exception of 1951–52, production has been high on account of exceptionally good seasons, and exports have exceeded imports by substantial margins. In 1957–58, exports exceeded imports by an amount of 162,000 lb.

Total quantities and values of exports of honey and bees-wax for the years 1955–56 to 1957–58 are shown in § 7 below.

### § 7. Exports of Australian Farmyard, Dairy and Bee Products.

The quantities and values of Australian farmyard, dairy and bee products exported during the years 1955–56 to 1957–58 are shown below.

#### EXPORTS OF FARMYARD, DAIRY AND BEE PRODUCTS: AUSTRALIA.

Particulars.	Unit of Quantity.	Quantity.			Value (£A'000 f.o.b. Port of Shipment).		
		1955–56.	1956–57.	1957–58.	1955–56.	1956–57.	1957–58.
Bees-wax .. .. .	lb.	178,489	117,193	170,167	48	35	43
Butter .. .. .	'000 lb.	185,112	170,834	113,779	28,968	25,824	15,639
Cheese .. .. .	"	38,486	39,265	20,675	3,537	3,861	2,208
Eggs in shell .. .. .	'000 doz.	16,071	10,142	11,828	2,847	1,997	1,851
Eggs not in shell— In liquid form .. .. .	'000 lb.	21,182	20,457	17,897	2,440	2,568	1,967
Dry .. .. .	"	61	8	43	15	10	19
Honey .. .. .	"	27,162	12,828	19,685	1,567	841	936
Lard .. .. .	"	137	126	397	15	15	23
Meats—							
Bacon and Ham (including canned) .. .. .	"	4,143	2,612	2,896	912	620	686
Frozen Poultry .. .. .	"	1,486	1,059	606	349	215	133
Frozen Pork .. .. .	"	2,472	1,437	2,149	364	271	318
Milk—							
Condensed, Preserved, etc.—							
Sweetened Full Cream .. .. .	"	52,353	63,234	67,995	3,700	4,222	5,101
Unsweetened .. .. .	"	3,590	2,932	1,909	222	189	120
Dried or Powdered—							
Full Cream .. .. .	"	15,130	15,269	13,898	2,151	2,155	2,128
Skim .. .. .	"	50,804	45,417	29,795	2,041	2,181	1,182
Malted .. .. .	"	5,508	6,088	5,343	815	906	750
Infants' and Invalids' Foods—							
Essentially of Milk .. .. .	"	3,591	7,382	8,207	555	1,091	1,228
Other .. .. .	"	6,374	7,246	6,388	1,067	1,334	1,238
Pigs, live .. .. .	Number	1,066	918	1,030	29	25	27
Poultry, live(a) .. .. .	"	37,764	50,823	143,869	6	7	20

(a) Including day-old chicks.

### § 8. Imports of Dairy and Farmyard Products into the United Kingdom.

NOTE.—Values of imports in this section are expressed in £ sterling at the landed c.i.f. point.

1. **Summary, Principal Products.**—The following table shows the quantities and values of the principal dairy products imported into the United Kingdom during the years 1939, 1957 and 1958.

## DAIRY PRODUCTS: IMPORTS INTO UNITED KINGDOM.

Product.	Unit of Quantity.	1939.		1957.		1958.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			£'000.		£'000.		£'000.
Butter .. ..	'000 cwt.	8,737	48,424	7,306	99,483	8,459	97,469
Cheese .. ..	"	2,845	8,869	2,465	25,059	2,371	23,577
Milk, powdered and preserved .. ..	"		2,818		7,002		6,956
Bacon and ham .. ..	'000 cwt.	7,953	37,105	7,095	91,828	7,280	97,226
Pork(a) .. ..	"	989	3,036	497	4,642	370	3,409
Eggs in shell .. ..	'000 doz.	283,315	12,835	11,773	1,954	14,858	2,193
Eggs not in shell, liquid or frozen .. ..	'000 cwt.	800	2,292	417	5,806	473	5,444

(a) Excludes pork in airtight containers.

2. **Butter.**—Until 1950, Australia had regularly supplied between 20 and 30 per cent. of the butter imported into the United Kingdom. After 1950, when butter rationing was abolished in Australia, the quantity shipped was considerably lower, but in 1956, it again amounted to 1,515,000 cwt., or 21.4 per cent. of the total United Kingdom imports. Shipments fell away again in subsequent years to 986,000 cwt., or 11.7 per cent. of the total United Kingdom imports, in 1958. New Zealand supplied 40.3 per cent. of the total quantity imported during 1958 and Denmark 22.5 per cent.

In the following table, particulars of the quantity and value of butter imported into the United Kingdom are shown for the years 1938, 1957 and 1958, according to country of origin.

## BUTTER: IMPORTS INTO UNITED KINGDOM.

Country from which Imported.	1938.		1957.		1958.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 cwt.	£'000.	'000 cwt.	£'000.	'000 cwt.	£'000.
New Zealand .. ..	2,592	14,524	2,924	39,067	3,405	38,946
Australia .. ..	1,798	9,630	1,067	13,615	986	11,635
Other Commonwealth Countries and Republic of Ireland .. ..	423	2,455	316	4,479	373	4,474
Denmark .. ..	2,365	12,960	1,740	25,757	1,907	23,244
Netherlands .. ..	712	3,466	254	3,720	593	6,611
Other Foreign Countries .. ..	1,628	7,838	1,005	12,845	1,195	12,559
<b>Total .. ..</b>	<b>9,518</b>	<b>50,873</b>	<b>7,306</b>	<b>99,483</b>	<b>8,459</b>	<b>97,469</b>

3. **Cheese.**—The value of cheese imported into the United Kingdom in 1958 was £23,577,000. Of this, £14,519,000 was imported from New Zealand, £2,297,000 from Denmark, £1,909,000 from the Netherlands, £1,795,000 from Canada and £1,251,000 from Australia.

4. **Bacon.**—Of a total import, in 1958, of bacon (excluding bacon in airtight containers), valued at £85,642,000, the value of that supplied by Denmark was £56,825,000, Poland, £11,258,000, the Irish Republic, £7,993,000, and the Netherlands, £6,175,000.

5. **Pork.**—The value of the United Kingdom imports of pork (excluding pork in airtight containers) was £3,409,000 in 1958. Imports from Argentina valued at £927,000, Commonwealth countries (other than New Zealand), £878,000, and New Zealand, £568,000, comprised 70 per cent. of these imports into the United Kingdom.

6. **Eggs.**—In 1958, the value of eggs imported into the United Kingdom was £7,637,000, comprising eggs in shell, £2,193,000, and liquid or frozen eggs, £5,444,000. Eggs in shell were supplied principally by Denmark, £1,237,000.

7. **Milk Products.**—In 1958, the value of preserved milk imported into the United Kingdom was £5,244,000. Of this total, imports from New Zealand amounted to £2,766,000 Australia, £819,000, and the Netherlands, £699,000.

8. **Other Dairy and Farmyard Products.**—The imports into the United Kingdom from Australia of poultry, bees-wax, lard and honey in 1958 were unimportant.

## CHAPTER XXV.

## FORESTRY.\*

## § 1. General.

NOTE.—Values of Australian oversea trade shown throughout this chapter are expressed in £A. f.o.b., port of shipment, except where otherwise indicated.

1. **Objects of Forestry.**—The main object of forestry is to manage the forests of a country in the way that will provide the maximum benefits, both direct and indirect. Direct benefits include the provision of essential commercial commodities such as structural timber, pulpwood, plywood, veneers, firewood, bark products, tars, oils and resins. Indirect benefits include protection of soil and stock from wind and exposure, regulation of stream flow, and aesthetic effects.

Forestry aims at improving existing forests and woodlands by properly controlled exploitation, by protection from destructive agencies such as fire, and by inducing natural regeneration where it is desirable. Forestry also aims at providing a partial tree cover on denuded lands when such cover is necessary for protective purposes, and a complete cover when the land is better under forest than under any other crop.

2. **General Account of Forests and Timbers.**—The area of land in Australia suitable for the production of commercial timber as the primary crop is very small in comparison with the size of the continent. It is concentrated mainly around the wetter coastal belts and the eastern highlands and it includes the bulk of the land suitable for intensive development by agricultural or pastoral undertakings.

The allocation of land for agricultural and pastoral purposes led to the clearing of much of the original forest of Australia, particularly of the more readily accessible parts. In the early period of agricultural and pastoral expansion, only the best timbers found their way into commerce, and species now prized as providing high quality woods were often put to inferior uses. During this period, the forest resources of the country were considered by the majority of the people to be inexhaustible, and relatively little care was taken to prevent the degradation of the remaining forests by fire and uncontrolled grazing. This state of affairs is rapidly changing; it is now recognized that the remaining forest land must be protected and properly managed in the interests of the community.

The trees which make up the forests of Australia are mainly evergreen hardwoods. The characteristic genus is *Eucalyptus*. There are over six hundred different kinds of eucalypts and with few exceptions the natural occurrence of all of them is restricted to Australia. The genus includes species such as the mountain ash (*Eucalyptus regnans*) of Victoria and Tasmania, the world's tallest growing hardwood, and the karri (*E. diversicolor*) of Western Australia, another forest giant. At the other end of the scale, there are many eucalypts which do not grow to tall trees, including the species collectively known as the "mallees". The mallees develop a number of small stems from an underground structure called the "mallee root".

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\* A specially contributed article dealing with Forestry in Australia appeared as part of Chapter XIX. in Official Year Book No. 19 (see pp. 701-12 therein).

Less than 100 eucalypts are used for sawmilling and not more than 40 are exploited extensively. The main commercial eucalypts were listed in Official Year Book No. 39 and earlier issues.

The eucalypts satisfy the Australian requirement for timbers having great strength and durability. They also provide a large proportion of the building timber and some of the wood required for packaging. In recent years, some eucalypts have been used extensively for papermaking and for the manufacture of hardboard and fibreboard. The species most commonly used for pulping are mountain ash (*E. regnans*), alpine ash (*E. gigantea*), and messmate, stringybark or Tasmanian oak (*E. obliqua*).

A large number of other genera represented in the Australian forest flora also produce commercial hardwoods. Among the outstanding furniture, cabinet and veneer timbers are red cedar (*Cedrela toona* var. *australis*), Queensland maple (*Flindersia brayleyana*), Southern and Northern silky oak (*Grevillea robusta* and *Cardwellia sublimis*, respectively), Queensland walnut (*Endiandra palmerstoni*), blackwood (*Acacia melanoxylon*), rose mahogany (*Dysoxylum fraseranum*), etc. Turpentine (*Syncarpia laurifolia*) ranks with the world's best as a harbour piling timber. Coachwood (*Ceratopetalum apetalum*) came into prominence for rifle furniture and for aircraft plywood during the 1939–45 War.

The foregoing are but a few examples indicating the range of use of the timbers of the Australian hardwood forests.

The most important indigenous softwood resources of Australia were in the forests of hoop pine (*Araucaria cunningghamii*) of Queensland and New South Wales. These forests occurred on rich land suitable for intensive agriculture. The greater part of the original hoop pine forest has gone but the wood removed made an important contribution to the Australian timber industry. Some areas of the hoop pine forest have been replanted with this species in Queensland and, to a lesser extent, in New South Wales.

There are still considerable areas of the useful white-ant-resisting cypress pine (*Callitris spp.*) in the inland areas of Queensland and New South Wales. They have been seriously overcut but are gradually being brought under management.

Other native softwoods which have played a useful but minor part in the Australian timber industry include bunya pine (*Araucaria bidwillii*) and kauri (*Agathis spp.*) of Queensland, and huon pine (*Dacrydium franklinii*), celerytop pine (*Phyllocladus rhomboidalis*) and King William pine (*Athrotaxis selaginoides*) of Tasmania.

The savannah woodlands of the interior of Australia yield commercial commodities such as sandalwood, tanbarks and essential oils. They also have an important function in providing fuel and rough timbers for the development of agricultural and pastoral holdings.

**3. Extent of Forests.**—According to data assembled for the Seventh British Commonwealth Forestry Conference held in Australia and New Zealand in 1957, the total area of forest in Australia is estimated at 186,791 square miles, or about 6.3 per cent. of the total land area of the continent. This is an increase of 27,040 square miles over the estimate made for the 1952 Conference, and has resulted from the inclusion of a large area of mallee in South Australia, together with 4,500 square miles of forests, mainly low grade woodlands, in the Northern Territory. The estimated forest area is distributed amongst the States as follows (the proportion of forest land to the total area of each State is shown in parentheses):—New South Wales and the Australian Capital Territory, 37,942 square miles (12 per cent.); Victoria, 26,222 (30 per cent.); Queensland, 28,000 (4 per cent.); South Australia, 36,000 (including 25,000 square miles of mallee suitable for firewood only) (10 per cent.); Western Australia, 41,826 (4 per cent.); Tasmania, 12,301 (47 per cent.) and the Northern Territory, 4,500 (1 per cent.). The areas given are rough estimates only and are considerably in excess of those which are both suitable for reservation and likely to be maintained for timber production. Included in the figures are considerable areas of low grade forest which, in many cases, are suitable for little more than the production of firewood. It is doubtful if the remaining prime native forest area of Australia exceeds 20,000 square miles. The proportion of Australia carrying commercial forests is therefore very low and apart from forests on the coastal fringe of the continent, the tree density is very low.

The table below shows a classification of the estimated total forest area referred to above:—

CLASSIFICATION OF FOREST AREA(a): AUSTRALIA.

Class of Forest:	Area (Square Miles).				Proportion of Total Forest Area.
	State Forest.	Communal Forest.	Private Forest.	Total.	
<i>Exploitable—</i>					Per cent.
Softwood .. ..	10,512	5	2,808	13,325	7.1
Mixed wood .. ..	754	..	..	754	0.4
Hardwood .. ..	41,691	75	13,129	54,895	29.4
<i>Total</i> .. ..	<i>52,957</i>	<i>80</i>	<i>15,937</i>	<i>68,974</i>	<i>36.9</i>
<i>Potentially Exploitable—</i>					
Softwood .. ..	58	..	100	158	0.1
Mixed wood .. ..	100	..	..	100	0.1
Hardwood .. ..	13,002	..	12,200	25,202	13.5
<i>Total</i> .. ..	<i>13,160</i>	<i>..</i>	<i>12,300</i>	<i>25,460</i>	<i>13.7</i>
<i>Other Lands Classed as Forest</i>	<i>81,023</i>	<i>450</i>	<i>10,884</i>	<i>92,357</i>	<i>49.4</i>
<b>Grand Total</b> .. ..	<b>147,140.</b>	<b>530</b>	<b>39,121</b>	<b>186,791</b>	<b>100.0</b>

(a) Based on the 1955 classification of forests.

State forests accounted for 78.8 per cent. of the total forest area, private forests for 20.9 per cent. and communal forests for 0.3 per cent.

The bulk of the softwood area of approximately 13,325 square miles is in Queensland and New South Wales and consists principally of slow-growing cypress pine (*Callitris spp.*) in low rainfall areas. The total area has been increased in comparison with previous estimates by the inclusion of a large area of crown land carrying scattered cypress pine. The volume of this species per acre is comparatively low.

4. **Forest Reservations.**—The first attempt to determine the forest areas which should be reserved solely for purposes of timber production was made at an Interstate Forestry Conference held at Hobart in 1920. This Conference decided that an area of 24½ million acres of indigenous forest should be permanently reserved. According to statements furnished by State and Commonwealth authorities, reservations of forest areas in Australia as at 30th June, 1958, totalled 33,226,915 acres, of which 22,683,365 acres were Dedicated State Forests and 10,543,550 acres were Timber and Other Reserves. The area of Dedicated State Forests increased by about 292,000 acres during the year 1957–58 and Timber and Other Reserves by some 34,000 acres. These changes were mainly a result of government policy to increase the forest estate but to dedicate only those areas which are suitable for permanent forest management. The distribution of these areas is shown by States in § 4, para. 2, page 989.

In general, the Timber Reserves are temporary and are liable to be alienated after the timber on them has been exploited. Some of these areas contain land of high value for forestry purposes, but the greater part does not justify permanent reservation.

If the permanently reserved areas were all of good quality, accessible, and fully productive forests supplying the class of timber required, they could be regarded as adequate for a much larger population than exists in Australia at the present time. Actually, however, a considerable proportion is in inaccessible mountainous country and many of the forests contain a mixture of species only some of which are at present of commercial value; much of the area consists of inferior forest and a large proportion of the whole has been seriously degraded by recurrent fires. Also, the indigenous forest does not contain adequate supplies of soft-woods producing commercial timbers and Australia's requirements of these have to be met largely by imports from other countries.

It is freely acknowledged by Australian forestry authorities that information on forest resources is very imperfect. It is not possible at present to give a reliable estimate of the forest areas needed to meet all future demands because of the number of unknown variables involved—in particular, the yield capacity per acre, future consumption of different classes of timber per head, and the future population. It appears, however, that all available potentially good forest country, including adequate areas for plantations of conifers, will need to be reserved, protected and systematically managed, if Australia is to approach the goal of self-sufficiency in timber supplies in the future. One of the most urgent requirements in this connexion is a comprehensive estimate of forest resources.

5. **Plantations.**—Reference has been made to the inadequacy of indigenous softwood supplies, but, as a result of the planned policy of the forest services of the States and the Commonwealth and, to a less extent, of several private commercial organizations, the area of softwood plantations, mainly of exotic species, is steadily increasing. It was natural that this aspect of forestry received earliest attention in South Australia as it is the State most poorly endowed with natural forest. This State now has a larger area of planted softwoods than any other State in Australia, and for some years has been exploiting considerable quantities of timber from these plantations. The total production is now over 130,000,000 superficial feet per annum and is expected to be increased substantially during the next decade. Production is also increasing in the other States and first thinnings from their plantations are already supplying a significant portion of the requirements of the case-making industry.

The extent of existing softwood plantations as at 30th June, 1958, is set out in the following table:—

**SOFTWOOD PLANTATIONS, 30th JUNE, 1958.**

State or Territory.	Government.			Private (mainly <i>P. radiata</i> ).	Total.
	<i>Pinus radiata</i> .	Other species.	Total.		
	Acres.	Acres.	Acres.	Acres.	Acres.
New South Wales .. ..	54,236	18,591	72,827	10,041	82,868
Victoria .. ..	33,884	10,775	44,659	48,884	93,543
Queensland .. ..	1,379	78,179	79,558	3,160	82,718
South Australia .. ..	98,143	7,576	105,719	35,133	140,852
Western Australia .. ..	6,232	18,319	24,551	296	24,847
Tasmania .. ..	11,790	397	12,187	4,275	16,462
Australian Capital Territory ..	18,672	2,104	20,776	100	20,876
<b>Australia .. ..</b>	<b>224,336</b>	<b>135,941</b>	<b>360,277</b>	<b>101,889</b>	<b>462,166</b>

A special article giving a detailed account of the history and development of softwood plantations and of the characteristics of individual species, prepared by the Commonwealth Forestry and Timber Bureau, is included in Official Year Book No. 44, page 975 *et seq.*

Hardwood plantations (mainly *Eucalyptus spp.*) comprise a much smaller area and the total acreage is about 30,000 acres, nearly two-thirds of which is mallet (*Eucalyptus astringens*) which has been established in Western Australia for tan bark production.

6. **Fire Protection.**—Fire control measures in Australia are the responsibility of the individual State Governments, and the provision of adequate fire protection is one of the main problems facing forest authorities at the present day. The forest services are responsible for fire protection measures over an area of some 43 million acres of dedicated and reserved forest areas throughout Australia, including some 10 million acres of Crown Land in Victoria.

The responsibility for the protection of private property outside urban areas rests with volunteer bush fire brigade organizations which are co-ordinated in each State by a committee or board carrying out functions of an advisory or educational nature and fostering the growth and organization of the bush fire brigade movement. Throughout the main agricultural and forest areas of Australia there are over 4,500 registered volunteer bush fire brigades with a membership approaching 200,000. Although both forest and rural fire organizations are entirely separate entities, a high degree of co-operation and liaison is maintained.

In addition to the forest service and rural organizations, various private and semi-Governmental bodies in each State maintain fire protection organizations, which are generally concerned with the protection of private forestry operations and hydro-electric and water catchment areas.

Over the five-year period 1952–57, the annual cost of protecting from fire 43 million acres of forest land for which State Forest Services are directly responsible is estimated at £1,500,000 or about 8½d. per acre. The cost of rural fire control as a whole cannot be estimated with any degree of accuracy, owing to the fact that by far the greatest contribution comes from the personal efforts of volunteer brigade members.

The Australian fire season is very variable, with an average of a particularly bad fire season every seven years or so. Such years as 1926, 1939, 1944 and 1952 account for a large proportion of the average annual burn which, for the period 1945 to 1955, amounted to 2.16 million acres or 1.8 per cent. of the total forested area of Australia. In disastrous

fire seasons, such as 1938-39 and 1951-52, the acreage burnt on protected forest areas was as high as 15 per cent., compared with an average burn of 1.2 per cent. when such seasons are excluded.

Since the 1939-45 War, forest services have greatly expanded their fire detection facilities and big advances have been made in the use of power pumping equipment. Radio communication is now being used extensively by both forest services and rural organizations, and considerable progress has been made in the provision of legislative power for the rural bush fire movement, although the volunteer movement itself dates back to the turn of the century.

Recognizing that fire prevention is one of the most important aspects of the problem, intensive campaigns have been conducted to reduce the incidence of man-caused fires. A study of fire causes in recent years reveals that human agencies account for 95 per cent. of all fires, and of this figure at least 80 per cent. are preventable. It is estimated that burning off, much of which is started illegally, accounts for 35 per cent. of all fires; smokers, hunters, fishermen and travellers cause 13 per cent. of all fires; whilst only 5 per cent. of fires in Australia are caused by lightning.

## § 2. Forestry Activities of the Commonwealth.

1. *Prior to 1925.*—When the Commonwealth of Australia was established on 1st January, 1901, forestry was not included among the matters transferred from the States to the control of the Commonwealth, and Federal jurisdiction was therefore restricted to the then relatively unimportant forests of the Australian Territories. After the 1914-18 War, these Territories (including Papua-New Guinea and Norfolk Island) covered a large area, and in the aggregate contained substantial forest resources. In the early twenties of this century, a professional forester was appointed as forestry adviser to the Commonwealth Government, and he submitted preliminary reports on the forest resources of Papua-New Guinea, Norfolk Island and the Australian Capital Territory, with suggestions for future policy.

2. *Forestry and Timber Bureau.*—In 1925, the Commonwealth Forestry Bureau was instituted, and the Commonwealth Forestry Adviser became the Inspector-General of Forests. By an Act of 1930, the Bureau received statutory powers, and its functions included the advising of the various Territorial Administrations on forestry matters, the management of forests placed under its control, the establishment of experimental forest stations, the training of students in forestry, etc.

At the end of the 1939-45 War, the Commonwealth Government decided to continue certain advisory functions which during the War had been carried out by War-time Timber Control, and such functions were incorporated in the Forestry and Timber Bureau Act 1946, under which the title of the Bureau was altered to Forestry and Timber Bureau. The powers and functions of the Bureau were extended to embrace the collection of statistics and information, and advising the Governments of the Commonwealth and the States or other interested bodies on matters relating to the supply, production, oversea trade and distribution of timber in Australia. The Bureau was placed under the administration of a Director-General.

The activities of the Bureau under its statutory functions are summarized below:—

(a) *Forestry Education.* The Australian Forestry School was opened at Adelaide University in 1926 in continuation of the School of Forestry of that University established in 1911. In 1927, the School was transferred to Canberra. The purpose of the School is to train students as professional officers to manage the forests of Australia. It also accepts students from overseas.

Training at the School covers the third and fourth years of a four-year course. The first two years are spent at an Australian university in a study of prescribed science subjects. Courses at the School lead to Commonwealth Diplomas in Forestry and in Forest Technology and, in the case of the former, can lead further to a degree in forestry of an Australian university. Applicants possessing a university degree granted for approved natural science subjects, or applicants with academic qualifications accepted by the Director-General as equivalent, may also be admitted to this School and proceed to the Diplomas. Graduates or Diploma holders approved by the Director-General may be admitted to the School to take selected subjects or to carry out research work.

The Board of Higher Forestry Education advises regarding pre-requisite university courses leading to the diploma courses and in regard to the maintenance of the standard of the School Diploma course.

In addition to students nominated by State Governments and other Australian and oversea authorities and organizations, private students are accepted at the School, and the Commonwealth Government offers up to ten forestry scholarships each year. These scholarships provide a salary allowance for the four years of the full diploma course.

During 1950, the number of students enrolled reached 80, owing to the intake of ex-servicemen taking university courses under the Commonwealth Reconstruction Training Scheme. The normal capacity of the School is 40.

(b) *Silvicultural Research.* Research headquarters and a Central Experimental Station have been established at Canberra. Other Forest Experimental Stations have been established at Mount Burr in the south-east of South Australia, in Tasmania, and at Dwellingup in Western Australia, on a co-operative basis with the Forest Services of those States. It is proposed to establish similar co-operative experimental stations in other States and Territories.

With its present limited staff, the research work of the Bureau has been concentrated largely upon studies of forest and climatic conditions, the genetical relationships and silvicultural requirements of various species, forest nutrition and the improvement of forest yields. A considerable expansion in the research activities is planned for the next few years as suitable trained staff becomes available.

(c) *Forest Management Research.* In the national interest, it is essential that over-cutting of forests should be avoided and in consequence, it is a matter of primary importance that reliable information be available as to the country's forest resources and potentialities. To this end, a national forest stocktaking is being carried out by the Bureau in co-operation with the Forest Services of the States and, to assist in the work of forest assessment, special consideration is being given to the development of the use of aerial surveys.

Consideration is also being given, in co-operation with the State Forest Services, to the establishment of increased areas of plantations of exotic pines with a view to providing additional supplies of softwood timber to meet requirements.

The general economics of forest management are also being studied.

(d) *Timber Supply.* The value of reliable statistical data covering availability of timber and timber requirements was so forcibly demonstrated during the 1939-45 War that it was considered essential to maintain at least a skeleton organization against times of future national emergency. Apart from this, it became clear that, for many years to come, shortages of timber on the one hand and heavy post-war reconstruction demands on the other, accentuated by a rapidly increasing population, would necessitate assessment of requirements and availability of supplies being kept constantly under review as a basis for short and long term policies of timber supply and distribution.

Advice is currently provided to government departments and the trade in matters pertaining to timber supply, including—(a) the availability of total quantities and quantities of particular grades and specifications required to meet Australia's needs; (b) the quantity of timber that should be imported; (c) the extent to which exports of timber and related products might be allowed without detriment to local needs; and (d) distribution of timber within Australia.

(e) *Management of Forests.* The Bureau manages the forests of the Australian Capital Territory and maintains a forestry officer in the Northern Territory. In addition, it is responsible for advising the administrations of the Northern Territory and the External Territories on the management of the forests under their charge.

3. **Commercial Forests.**—The forest areas under Commonwealth control include the following:—

- (a) *Australian Capital Territory.* The forests of the Australian Capital Territory are administered by a Division of the Forestry and Timber Bureau. Further information is contained in Chapter V.—The Territories of Australia.
- (b) *Northern Territory.* The forests of the Northern Territory are administered under ordinance by the Administrator of that Territory. The native forests of the Territory are very limited, consisting largely of open eucalypt forest in the north, with very restricted patches of rain forest along streams, river-fringing forests of paper bark tea-tree, patches of cypress pine, and elsewhere savannah woodland deteriorating to mallee and mulga in the interior. The Bureau maintains a forestry officer in the Territory for investigation and advisory purposes.
- (c) *Norfolk Island.* The forests of Norfolk Island are administered by the Administrator of that Territory. The area reserved for forest covers 1,037 acres, of which the main species is Norfolk Island pine.
- (d) *Papua and New Guinea.* The forests of the Territory of Papua and New Guinea are managed by a Forestry Department under the control of a Director, and are administered under an ordinance of the Territorial Administration. Forestry in the Territory commenced with the appointment of two officers in 1938. Further information is contained in Chapter V.—The Territories of Australia.

4. **Forest Products Research.**—Fundamental investigations connected with the properties and uses of timber and forest products generally are carried out by the Forest Products Division of the Commonwealth Scientific and Industrial Research Organization. These investigations cover a very wide field, e.g., pulp, paper, seasoning, structure and chemistry of wood, tans, etc.

Details can be obtained from the annual reports and publications of the Forest Products Division.

### § 3. Forestry Conferences.

The first British Empire Forestry Conference was held in London in 1920. Subsequent conferences were held in Ottawa in 1923, Australia and New Zealand, 1928, South Africa, 1935 and again in the United Kingdom in 1947. In conformity with the development of the British Commonwealth of Nations, the name of these conferences was changed to British Commonwealth Forestry Conference. The sixth was held in Canada in 1952 and the seventh in Australia and New Zealand in 1957.

### § 4. State Forestry Departments.

1. **Functions.**—Except for Queensland, the powers and functions of State forest authorities are laid down under Forestry Acts and Regulations. In each State, there is a department or commission to control and manage the forests of the State. The functions of these administrations are as follows:—(a) The securing of an adequate reservation of forest lands; (b) the introduction of proper measures for scientific control and management of forest lands; (c) the protection of forests; (d) the conversion, marketing and economic utilization of forest produce; and (e) the establishment and maintenance of coniferous forests to remedy the existing deficiency in softwoods. Annual reports are issued by each State forest authority. In Queensland, forestry is a sub-department of the Department of Public Lands. Victoria maintains a forestry school at which recruits are trained for the forestry service of that State.

2. **Forest Reservations.**—As mentioned in § 1, para. 4, page 985, State forest authorities agreed that, in order to secure Australia's future requirements, an area of 24½ million acres should be permanently reserved. At June, 1958, the area of State Forests reserved in perpetuity totalled 22,683,365 acres or 92.6 per cent. of the area recommended as the goal to be attained.

In addition to the work of permanently reserving areas in each State, foresters are endeavouring to survey all timbered lands with a view to the elimination of those unsuitable for forestry. Considerable areas have been revoked in certain States, while dedications of new areas have resulted in gains to the permanent forest estate. The Forestry Departments also usually control all timber on open Crown lands as well as over 10 million acres of timber reserves, national parks, etc., but, while these areas contain some land of high value for forestry purposes, the greater part does not justify permanent reservation.

In the following table, details of forest areas as recorded by State Forest Authorities are shown for each State as at 30th June, 1958, distinguishing between dedicated State forests, timber reserves and other forest reserves. In addition, details of forest reservations in the Northern Territory and Australian Capital Territory are shown.

AREA OF FOREST RESERVATIONS, 30th JUNE, 1958.  
(Acres.)

State or Territory.	State Forests.	Timber Reserves (Forest Acts).	Other Reserves.	Total.
New South Wales .. .. .	6,348,705	1,416,528	..	7,765,233
Victoria .. .. .	4,841,913	710,558	(a)169,302	5,721,773
Queensland .. .. .	5,033,233	3,048,412	(b)837,316	8,918,961
South Australia .. .. .	267,799	..	..	267,799
Western Australia .. .. .	4,169,090	1,835,856	(a)933,403	6,938,349
Tasmania .. .. .	2,015,725	137,028	(c)972,147	3,124,900
Northern Territory .. .. .	6,900	..	352,000	358,900
Australian Capital Territory .. .. .	..	..	(d)131,000	131,000
<b>Australia .. .. .</b>	<b>22,683,365</b>	<b>7,148,382</b>	<b>3,395,168</b>	<b>33,226,915</b>

(a) Timber reserves under the Land Act. (b) National parks. (c) Consists of 612,000 acres of pulp concessions over Crown land and 360,147 acres of exclusive forest permits not elsewhere included. (d) Forest land not specifically reserved.

3. **Employment.**—In the table below, details are shown of the number of persons employed by State Forestry Departments, and by the Forestry and Timber Bureau in respect of the Australian Capital Territory and the Northern Territory, at 30th June, 1957.

**PERSONS EMPLOYED BY FORESTRY DEPARTMENTS, 30th JUNE, 1957.**

Occupational Group.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Professional Staff .. ..	167	194	76	60	45	24	1	7	574
Non-professional Staff .. ..	200	297	87	11	117	98	1	..	811
Field .. ..	323	196	161	88	47	59	..	5	879
Clerical Staff .. ..	..	87	113	77	111	..	..	..	..
Extraction of Timber .. ..	..	34	..	620	21	..	..	..	..
Milling of Timber .. ..	1,273	649	1,367	209	527	238	..	66	5,392
Labour (forest workers, etc.) .. ..	..	..	..	..	..	..	..	..	..
<b>Total .. ..</b>	<b>1,963</b>	<b>1,457</b>	<b>1,804</b>	<b>1,065</b>	<b>868</b>	<b>419</b>	<b>2</b>	<b>78</b>	<b>7,656</b>

**§ 5. Forestry Production.**

1. **Timber.**—Particulars of logs treated and the production of rough sawn timber by sawmills and other woodworking establishments are shown in the following table by States for the year 1956–57.

**OUTPUT OF AUSTRALIAN GROWN TIMBER: ALL MILLS, 1956-57.**  
(<sup>'000</sup> super. feet.)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(a)
Hardwood ..	485,936	548,499	316,424	6,981	486,675	263,266	2,107,781
Softwood ..	109,715	46,162	113,669	156,728	10,930	10,205	447,409
<b>Total ..</b>	<b>595,651</b>	<b>594,661</b>	<b>430,093</b>	<b>163,709</b>	<b>497,605</b>	<b>273,471</b>	<b>2,555,190</b>

**LOGS TREATED, INCLUDING THOSE SAWN ON COMMISSION.(b)**

Hardwood ..	485,936	548,499	316,424	6,981	486,675	263,266	2,107,781
Softwood ..	109,715	46,162	113,669	156,728	10,930	10,205	447,409
<b>Total ..</b>	<b>595,651</b>	<b>594,661</b>	<b>430,093</b>	<b>163,709</b>	<b>497,605</b>	<b>273,471</b>	<b>2,555,190</b>

**SAWN TIMBER PRODUCED FROM LOGS ABOVE.(c)**

Hardwood ..	301,504	317,837	199,225	3,534	198,679	130,650	1,151,429
Softwood ..	64,044	24,451	76,711	91,335	5,796	5,094	267,431
<b>Total ..</b>	<b>365,548</b>	<b>342,288</b>	<b>275,936</b>	<b>94,869</b>	<b>204,475</b>	<b>135,744</b>	<b>1,418,860</b>

(a) Excludes the Australian Capital Territory and the Northern Territory, details for which are not available. (b) Includes logs used for plywood and veneer production. (c) Includes the sawn equivalent of timber peeled or sliced for plywood and veneers.

The following table shows logs used and sawn timber produced in Australia for the years 1938–39 and 1952–53 to 1956–57.

**OUTPUT OF AUSTRALIAN GROWN TIMBER: ALL MILLS, AUSTRALIA.(a)**

Particulars.	Unit.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Logs used—							
Hardwood ..	<sup>'000</sup> super. feet (hoppus measure)	1,015,136	1,970,126	2,047,906	2,101,306	2,139,337	2,107,781
Softwood ..	.. ..	293,680	369,881	414,827	444,536	463,213	447,409
<b>Total ..</b>	.. ..	<b>1,308,816</b>	<b>2,340,007</b>	<b>2,462,733</b>	<b>2,545,842</b>	<b>2,602,550</b>	<b>2,555,190</b>
Sawn Timber Produced—							
Sawn equivalent of Timber Peeled or Sliced for Plywood and Veneers ..	<sup>'000</sup> super. feet	21,639	21,606	28,492	27,676	27,957	27,128
Used for other purposes ..	.. ..	695,376	1,318,191	1,371,606	1,421,612	1,421,765	1,391,732
<b>Total Sawn Timber—</b>							
Hardwood ..	.. ..	526,229	1,115,423	1,157,124	1,184,992	1,180,936	1,151,429
Softwood ..	.. ..	190,786	224,374	242,974	264,296	268,786	267,431
<b>Total ..</b>	.. ..	<b>717,015</b>	<b>1,339,797</b>	<b>1,400,098</b>	<b>1,449,288</b>	<b>1,449,722</b>	<b>1,418,860</b>

(a) Excludes the Australian Capital Territory and the Northern Territory, details for which are not available.

The next table shows the sawn output of native timber in sawmills and other wood-working establishments in each State for the years 1938-39 and 1952-53 to 1956-57.

SAWN OUTPUT (a) OF AUSTRALIAN GROWN TIMBER: ALL MILLS.  
(<sup>0</sup>000 super. feet.)

State.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
New South Wales ..	179,350	350,792	370,279	372,920	362,709	365,548
Victoria ..	120,197	322,209	338,957	362,334	351,271	342,288
Queensland ..	193,250	285,074	288,380	264,914	261,730	275,936
South Australia ..	14,537	68,500	68,190	68,942	100,983	94,869
Western Australia ..	125,453	203,314	216,021	225,794	222,397	204,475
Tasmania ..	84,228	109,908	118,271	140,384	150,632	135,744
Australia (b) ..	717,015	1,339,797	1,400,098	1,449,288	1,449,722	1,418,860

(a) Includes the sawn equivalent of timber peeled or sliced for plywood and veneers. (b) Excludes the Australian Capital Territory and the Northern Territory, details for which are not available.

In addition to the sawn timber shown in the preceding table, a large amount of other timber, e.g., sleepers, piles, poles, fencing material, timber used in mining, and fuel, is obtained from forest and other lands. Complete information in regard to the volume of this output is, however, not available. The annual reports of the Forest Departments of the States contain particulars of the output of timber from areas under departmental control but owing to lack of uniformity in classification and measurement accurate determination of total production cannot be made. Moreover, there is a moderate quantity of other timber produced from privately owned land, but information regarding output is not available.

2. Wood Pulp and Paper.—(i) *Wood Pulp.* The manufacture of wood pulp from Australian-grown timber was established in Australia in 1939, after years of experimentation with eucalypt hardwoods, production in 1938-39 being 6,165 tons of wood pulp. During 1957-58, four wood pulp mills were operating in three States and production during that year was 131,740 tons of chemical pulp and 75,855 tons of mechanical pulp, a total of 207,595 tons.

(a) *Victoria.* In Victoria, Australian Paper Manufacturers Ltd. produce wood pulp at Maryvale in Gippsland by a chemical process known as the kraft or sulphate process. The timber used at this mill consists mainly of eucalypt hardwoods at present unsuitable for other purposes and, in addition, a small quantity of plantation pine thinnings and mill waste and special softwood for production of cellulose. During 1957-58, a total of 322,392 tons of eucalypt and pine pulpwood was supplied to the Maryvale mill. A.P.M. Forests Pty. Ltd. is continuing to establish plantations of both pines and eucalypts in Gippsland.

(b) *South Australia.* In South Australia, a paper board mill operates near Millicent, using raw material in the form of logs from the State Forests in the south-east of South Australia. During 1956-57 and 1957-58, 6,577,728 and 6,700,505 super feet of pulpwood respectively were used in this mill. The forests of South Australia also supply large quantities of pulpwood in log form to Australian Paper Manufacturers Ltd., Victoria, and during 1957-58 delivered 15,161,058 super feet of pulpwood. Legislation was passed in 1958 to enable the establishment, in the near future, of a new tissue paper mill near Millicent.

(c) *Tasmania.* In Tasmania, two large mills are making pulpwood from indigenous hardwoods. At Burnie, on the north-west coast, Associated Pulp and Paper Mills Ltd. use a chemical method, the soda process, to produce wood pulp for fine writing and printing papers from eucalypt hardwoods. This plant is of the most modern design and pulp and paper manufacture are combined with sawmilling and hardboard production. Offcuts and rejects from the timber mill are used for pulping and the manufacture of hardboard. Utilization of the freehold and concession forest areas held by the company is being extended to logging areas held by other sawmilling firms, who supply logs unsuitable for milling to the pulp mills. A continuous digester has been installed at the Burnie mill, making it the only one in Australia using a continuous pulping process. The forests are managed on a permanent yield basis with regeneration of the eucalypts in all suitable areas. Pine plantations are being established to provide softwoods for pulping.

Australian Newsprint Mills Ltd. at Boyer, 20 miles from Hobart, is the only producer of newsprint in Australia. Wood pulp is produced from hardwoods drawn from State timber concession areas. A mechanical process only was used until 1957 when additional

plant was installed for the manufacture of semi-chemical pulp using the cold soda process which allows the utilization of additional species not suitable for ground wood pulp. Eucalypts provide about 80 per cent. of the mills' requirements for wood pulp, the remainder being imported long fibre softwood pulp. To secure more complete bush utilization, the company has established three sawmills to convert understorey species such as myrtle, sassafras, blackwood and celery top pine to sawn timber. The forests are managed on a sustained yield basis. Forest utilization and management are designed to obtain eucalypt regeneration. Experimental work into the problems involved is being carried out by the company and the Tasmanian Forestry Commission.

(ii) *Paper and Paper Board.* Paper and paper board are manufactured in all States but the industry is centred mainly in New South Wales, Victoria and Tasmania. During 1957-58, eighteen paper mills were operating, seven in Victoria, four in New South Wales, three in Tasmania, two in Queensland and one each in South Australia and Western Australia. A wide variety of papers and paper boards is produced in Australian mills, the quantity and value of paper produced in 1957-58 being as follows:—newsprint, 81,085 tons valued at £6,227,529; blotting, 537 tons, £94,571; duplicating, 4,305 tons, £684,960; printing and writing, 47,521 tons, £8,154,766, kraft wrapping, 50,613 tons, £6,569,533; other wrapping, 14,669 tons, £2,434,018; felt and carpet felt, 4,553 tons, £464,406; and other paper, 34,289 tons, £3,675,831. In addition, 179,985 tons of paper boards valued at £15,984,924 were produced in 1957-58.

3. *Other Forest Products.*—(i) *Veneers, Plywood, etc.* Cutting of timber for the manufacture of veneers, plywood, etc., has been carried out in most States for a number of years. In later years however, this has been considerably extended and much greater use has been made of locally-grown timbers, both hardwoods and softwoods. Special attention has also been paid to the selection of logs suitable for peeling.

The following table shows the production of plywood for each of the years 1938-39 and 1953-54 to 1957-58:—

PLYWOOD PRODUCED.  
(<sup>3</sup>/<sub>16</sub> inch square feet—<sup>3</sup>/<sub>16</sub> in. basis.)

State.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
New South Wales	24,194	28,601	35,039	39,256	41,921	45,647
Queensland ..	66,100	114,545	130,330	133,230	118,647	131,205
Other States ..	14,511	18,435	21,235	28,213	33,797	36,023
<b>Australia ..</b>	<b>104,805</b>	<b>161,581</b>	<b>186,604</b>	<b>200,699</b>	<b>194,365</b>	<b>212,875</b>

Of the total plywood produced in 1957-58, 165,262,000 square feet (<sup>3</sup>/<sub>16</sub> in. basis) was classed as "Commercial", 25,493,000 as "Waterproof", 2,179,000 as "Case" and 19,941,000 as "Sliced Fancy".

During 1957-58, 506.6 million square feet (<sup>1</sup>/<sub>8</sub> in. basis) of veneers were produced by the rotary process for the manufacture of plywood, and 179.0 million square feet (<sup>1</sup>/<sub>8</sub> in. basis) were sold or added to stock, the bulk of which would eventually be used in the production of plywood. In addition, 47.7 million square feet of sliced veneers were produced.

(ii) *Hardboard.* The production of hardboard for building purposes from pulped wood has increased considerably in Australia in recent years. There were five factories producing hardboard during 1957-58 (two in New South Wales, and one each in Queensland, South Australia, and Tasmania) and during the four years ended 30th June, 1958, the following quantities and values were produced:—1954-55, 19,834,000 square yards, £3,810,000; 1955-56, 22,619,000 square yards, £4,326,387; 1956-57, 22,456,000 square yards, £4,630,051 and 1957-58, 24,504,000 square yards, £4,791,045.

Most of this hardboard enters into normal usage in the condition in which it leaves the producing factories. The remainder is further treated and surfaced to a variety of finishes and in 1957-58, this production amounted to 1,549,000 square yards valued at £855,000.

(iii) *Eucalyptus Oil*. Oil may be distilled from the foliage of all varieties of *Eucalyptus*, and several of them furnish a product widely known for its commercial and medicinal uses. Complete information regarding Australian production and consumption of eucalyptus oil is not available, but considerable quantities are manufactured, particularly in New South Wales and Victoria. The value of oversea exports of eucalyptus oil distilled in Australia was £163,763 in 1953-54; £153,572 in 1954-55; £274,037 in 1955-56; and £198,572 in 1956-57. The quantities exported in the years 1953-54 to 1956-57 were 504,628 lb., 443,933 lb., 683,131 lb. and 547,435 lb. respectively.

(iv) *Gums and Resins*. Gums and resins are produced in most States of Australia, the main product being grass tree, or yacca gum. This gum, which is used in the preparation of varnishes and lacquers, comes chiefly from South Australia while small quantities are also produced in New South Wales and Western Australia. In 1956-57, the recorded production for Australia of gums and resins was 11,777 cwt. Exports of yacca gum from Australia during the same period amounted to 6,715 cwt., valued at £16,636.

(v) *Tanning Barks*. The forests of Australia are capable of yielding a wealth of tanning materials, many species of *Eucalyptus* and other genera containing varying proportions of tannin, chiefly in the bark, but also in the wood and twigs. Scattered distribution however, has resulted in only the richest tan-bearing species being used in Australia. These are:—Golden wattle (*Acacia pycnantha*), black or green wattle (*Acacia decurrens* or *mollissima*), and mallet (*Eucalyptus astringens*). Mallet (*E. astringens*), of Western Australia, is not extensively used in Australian tanneries, but is exported to Europe and other countries. Reference to oversea trade in tanning barks is made in § 6, para. 3, page 996.

The production of extract from the bark of karri (*E. diversicolor*), of which very large quantities are available at karri sawmills, has passed the experimental stage, and private enterprise has started production on a commercial scale. The experimental work in kino impregnated karri (*E. calophylla*) bark is not yet complete. The total production of tanning bark in Australia approximated 25,000 tons per annum in the years prior to 1939, but since then, production has declined and in 1956-57 was only 11,754 tons. However, this decrease is offset by the increased use of vegetable tanning extracts and synthetic tanning agents.

4. Value of Production.—(i) *Gross and Local Values, 1956-57*. The values of forestry production on a gross and local basis are shown in the following table for the year 1956-57.

GROSS AND LOCAL VALUE OF FORESTRY PRODUCTION, 1956-57.  
(£'000.)

State or Territory.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Place of Production.
New South Wales .. ..	17,261	503	16,758
Victoria .. ..	13,134	837	12,297
Queensland .. ..	10,432	945	9,487
South Australia .. ..	4,173	122	4,051
Western Australia .. ..	5,153	374	4,779
Tasmania .. ..	5,198	675	4,523
Northern Territory .. ..	40	(a)	40
Australian Capital Territory ..	175	11	164
<b>Australia</b>	<b>55,566</b>	<b>3,467</b>	<b>52,099</b>

(a) Not available.

No information is available on the value of materials used in the process of production for 1956-57 and hence it is not possible to calculate net value of forestry production.

(ii) *Local Values, 1934-35 to 1938-39 and 1952-53 to 1956-57*. In the following table, the local value of forestry production and the local value per head of population are shown

by States for the years 1952-53 to 1956-57 in comparison with the average for the five years ended 1938-39. Local value is gross value less marketing costs and is the value at place of production.

### LOCAL VALUE OF FORESTRY PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(a)
LOCAL VALUE. (£'000.)							
Average, 1934-35 to 1938-39(b) ..	2,094	837	2,226	547	1,176	394	7,274
1952-53 .. ..	13,692	8,904	7,102	3,790	3,328	3,248	40,064
1953-54 .. ..	12,905	9,475	7,797	4,373	3,615	3,555	41,720
1954-55 .. ..	13,686	9,987	7,895	4,427	3,850	4,037	44,047
1955-56 .. ..	15,343	11,823	8,660	4,596	4,877	4,591	50,059
1956-57 .. ..	16,758	12,297	9,487	4,051	4,779	4,523	52,099

### LOCAL VALUE PER HEAD OF POPULATION. (£ s. d.)

Average, 1934-35 to 1938-39(b) ..	0 15 7	0 9 1	2 5 2	0 18 7	2 11 8	1 13 9	1 1 4
1952-53 .. ..	4 1 4	3 15 1	5 11 8	4 18 11	5 8 11	10 14 8	4 12 2
1953-54 .. ..	3 15 10	3 18 3	5 19 11	5 11 3	5 14 7	11 9 10	4 14 3
1954-55 .. ..	3 19 1	4 0 3	5 19 2	5 9 8	5 18 8	12 17 11	4 16 11
1955-56 .. ..	4 7 1	4 12 2	6 8 0	5 10 2	7 5 10	14 7 8	5 7 5
1956-57 .. ..	4 13 5	4 13 2	6 17 6	4 14 1	6 19 8	13 17 4	5 9 3

(a) Details for the Australian Capital Territory and the Northern Territory are excluded for years prior to 1954-55. (b) Net value of production (i.e., local value less value of materials used in the course of production) has been included for certain years for Victoria and Western Australia.

5. *Employment.*—(i) *Forestry Operations.* The estimated number of persons employed in forestry operations at 30th June, 1954, including working proprietors, but excluding those employed in the sawmilling industry, as recorded at the 1954 Census, was 15,300.

(ii) *Milling Operations.* Details of the average number of persons employed, including working proprietors, in the milling operations of sawmills during the years 1956-57 and 1957-58 are shown in the next table. Further details regarding the operations of these mills are shown in Chapter VI.—Manufacturing Industry.

### SAWMILLS : AVERAGE NUMBER OF PERSONS EMPLOYED.

Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia. (a)
1956-57.							
Males .. ..	9,170	7,120	6,636	2,017	4,048	2,474	31,465
Females .. ..	394	225	304	176	39	81	1,219
<b>Total .. ..</b>	<b>9,564</b>	<b>7,345</b>	<b>6,940</b>	<b>2,193</b>	<b>4,087</b>	<b>2,555</b>	<b>32,684</b>
1957-58.							
Males .. ..	9,128	6,814	6,340	2,087	3,953	2,352	30,674
Females .. ..	387	219	314	166	35	80	1,201
<b>Total .. ..</b>	<b>9,515</b>	<b>7,033</b>	<b>6,654</b>	<b>2,253</b>	<b>3,988</b>	<b>2,432</b>	<b>31,875</b>

(a) Excludes Northern Territory and Australian Capital Territory, details for which are not available.

§ 6. Imports and Exports of Timber and Tanning Substances.

1. Imports of Timber, Veneers and Plywood.—The quantities of timber imported into Australia during the year 1956-57 are shown in the following table according to countries of origin:—

IMPORTS OF TIMBER, VENEERS AND PLYWOOD INTO AUSTRALIA :  
COUNTRIES OF ORIGIN, 1956-57.

Country of Origin.	Logs (including desapped).		Undressed timber. (a)		Box shocks. ('000 super ft.)	Dressed timber. ('000 super ft.)	Veneers. ('000 sq. ft.)	Ply-wood. ('000 sq. ft.)
	Soft-wood. ('000 super ft.)	Hard-wood. ('000 super ft.)	Soft-wood. ('000 super ft.)	Hard-wood. ('000 super ft.)				
United Kingdom .. .. .	..	53	..	159	..	..	2,874	4
Australian Territories—								
New Guinea .. .. .	698	1,757	1,950	637	2	40	3,862	18,017
Borneo .. .. .	135	32,761	197	19,141	..	..	..	..
Canada .. .. .	..	..	99,106	94	..	220	..	84
Malaya, Federation of .. .. .	..	..	272	21,718	948	63	16	2
New Zealand .. .. .	..	..	30,947	135	932	127	..	68
Pacific Is. (British)—Solomon Is. .. .. .	2,737	653	..	..	..	..	..	..
Other Commonwealth Countries .. .. .	297	784	96	994	12	2	28	12
Brazil .. .. .	..	..	3,961	..	..	..	6	..
Finland .. .. .	..	..	95	..	..	5,452	5	..
France .. .. .	..	..	..	12	..	4	722	..
French Dependencies .. .. .	..	..	..	..	..	..	672	..
Germany, Federal Republic of .. .. .	..	..	..	..	2	1	572	..
Indonesia .. .. .	..	..	1,562	614	..	..	..	..
Japan .. .. .	..	..	..	174	26	..	..	1,139
Norway .. .. .	..	..	16	10	..	5,774	..	..
Philippines .. .. .	..	875	..	..	..	..	..	..
Sweden .. .. .	..	..	1,356	31	1	10,082	..	..
United States of America .. .. .	38	17	85,558	570	..	132	196	..
Other Foreign Countries .. .. .	..	11	2	437	476	4	540	238
<b>Total .. .. .</b>	<b>3,905</b>	<b>36,911</b>	<b>225,118</b>	<b>44,726</b>	<b>2,399</b>	<b>21,901</b>	<b>9,495</b>	<b>19,562</b>

(a) Excludes railway sleepers.

Most of the logs imported are hardwoods from Borneo, the value of all logs imported being £971,000 during 1956-57. In the same year, the value of undressed timber imported totalled £12,463,000, of which more than 80 per cent. was softwood. Of the imports of undressed timber, softwoods came principally from Canada, the United States of America and New Zealand, while hardwoods came mainly from Malaya and Borneo. The bulk of the imports of dressed timber now comes from Sweden, Norway and Finland. The total value of dressed timber shown in the table above amounted to £1,608,000 during 1956-57. New Guinea and the United Kingdom supplied the greater part of the imports of veneers, which were valued at £115,000 while New Guinea was the largest supplier of plywood, imports of which were valued at £750,000.

2. Exports of Timber, Railway Sleepers, Veneers and Plywood.—The quantities of timber, railway sleepers, veneers and plywood exported during the year 1956-57 are shown below, together with the countries of consignment.

EXPORTS OF TIMBER, RAILWAY SLEEPERS, VENEERS AND PLYWOOD FROM AUSTRALIA : COUNTRIES OF CONSIGNMENT, 1956-57.

Country of Consignment.	Logs (including desapped).		Undressed timber.		Railway sleepers. ('000 super ft.)	Dressed timber. ('000 super ft.)	Veneers. ('000 sq. ft.)	Ply-wood. ('000 sq. ft.)
	Soft-wood. ('000 super ft.)	Hard-wood. ('000 super ft.)	Soft-wood. ('000 super ft.)	Hard-wood. ('000 super ft.)				
United Kingdom .. .. .	..	..	..	2,790	924	402	4,960	497
Australian Territories—								
New Guinea .. .. .	..	8	1	45	..	21	..	17
Nauru .. .. .	..	..	139	284	10	109	..	..
Other .. .. .	..	7	18	134	..	33	..	23
Ceylon .. .. .	..	..	..	115	1,937	..	..	..
Hong Kong .. .. .	..	..	..	68	313	..	58	9
Mauritius .. .. .	..	..	..	316	502	..	..	..
New Zealand .. .. .	..	6,164	..	9,769	16,645	..	656	324
Pacific Islands (British)—								
Fiji .. .. .	..	9	..	825	132	155	..	11
Gilbert and Ellice Is. .. .. .	..	..	264	146	..	51	..	1
Other .. .. .	..	17	193	159	..	21	..	17
South Africa, Union of .. .. .	..	..	..	2,204	1,864	..	2	..
Other Commonwealth Foreign Countries .. .. .	..	21	27	544	..	75	5	2
Australian Produce .. .. .	..	7	5	1,526	282	22	43	32
Re-exports .. .. .	..	6,226	70	18,859	22,609	872	5,724	927
.. .. .	..	7	577	66	..	17	..	6
<b>Total .. .. .</b>	<b>..</b>	<b>6,233</b>	<b>647</b>	<b>18,925</b>	<b>22,609</b>	<b>889</b>	<b>5,724</b>	<b>933</b>

Exports of timber were consigned mainly to New Zealand, the United Kingdom and the Union of South Africa, and consisted largely of the Western Australian hardwoods, jarrah and karri, which have earned an excellent reputation for such purposes as harbour works and wood paving, etc. The total value of exports of undressed timber, excluding railway sleepers, during 1956-57 was £1,306,000 (hardwood £1,251,000, softwood £55,000). Railway sleepers exported were valued at £1,366,000.

3. Classification of Imports and Exports.—(i) *General.* The quantities and values of timber, according to items, imported and exported during the year 1956-57 are shown in the following table:—

**TIMBER: IMPORTS AND EXPORTS, AUSTRALIA, 1956-57.**

Item.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
	'000 super. ft.	£A. f.o.b.	'000 super. ft.	£A. f.o.b.
Logs, not sawn—				
Softwood .. .. .	3,905	109,870	..	..
Hardwood .. .. .	36,911	861,323	6,233	366,724
Timber, undressed (including railway sleepers)—				
Softwood .. .. .	225,118	10,225,098	647	55,470
Hardwood .. .. .	44,995	2,237,692	41,534	2,617,227
Timber for boxmaking .. .. .	2,399	148,170	(a)	(a)
Timber, dressed—				
Flooring, lining and weatherboards ..	21,480	1,426,921	} 889	96,551
Other .. .. .	421	33,195		
Veneers .. .. .	9,495	114,732	'000 sq. ft.	133,588
Plywood .. .. .	19,562	750,384	933	57,300
Other Timber (b) .. .. .	..	5,643	..	401
<b>Total .. .. .</b>	<b>..</b>	<b>15,913,028</b>	<b>..</b>	<b>3,327,261</b>

(a) Not recorded separately.  
not available.

(b) Includes dunnage and timber for which quantity data are

(ii) *Tanning Substances.* The imports of tanning substances of natural origin in 1956-57 amounted to 154,742 cwt. valued at £536,237 (bark, 1,702 cwt., £3,966; extracts, 129,315 cwt., £454,395; and other tanning substances including valonia, myrabolans, catch, etc., 23,725 cwt., £77,876) compared with 173,035 cwt., valued at £602,555 (bark, 2,083 cwt., £4,192; extracts, 131,474 cwt., £500,189; and other tanning substances 39,478 cwt., £98,174) in 1955-56. Exports during the same periods were 183,172 cwt. valued at £546,778 and 139,709 cwt., valued at £480,190 respectively.

The imports of tanning bark consist almost exclusively of wattle bark from the plantations in South Africa. One species of Australian wattle, *Acacia mollissima*, is chiefly relied upon for the production of wattle bark in the South African plantations, most of the seed being obtained from the best wattle bark areas in eastern Tasmania and western Victoria. Two reasons are given to account for the success of the industry in the Union of South Africa:—(a) The suitability of the treeless, grassy highlands of Natal; and (b) the availability of native labour.

## CHAPTER XXVI.

## FISHERIES.

## § 1. General.

1. **Fish Resources.**—The waters surrounding the Australian continent contain a great variety of marine fauna. Despite this, the fish stocks in Australian waters, in common with most other countries of the Southern Hemisphere, are small by comparison with the stocks in the Northern Hemisphere. The reasons for this comparative shortage have not been fully explained but it seems clear that the basic factors involved are the absence of large expanses of shallow water and the much lower fertility of the oceans of the Southern Hemisphere.

The existence of greater fish stocks, of course, largely explains why approximately 98 per cent. of the world production of fish comes from the Northern Hemisphere. Nevertheless, the Australian catch is low even after making allowance for the smaller resources available. Further explanation must be sought in terms of the socio-economic factors which determine the demand for and supply of fish.

Compared with certain countries in the Northern Hemisphere the consumption of fish in Australia per head is small. Consequently, there is not the pressure on resources necessary to induce expansion in the fishing industry and to encourage the investment of large amounts of capital. On the other hand, even this somewhat restricted Australian demand for fish is not met from purely local sources of supply and quantities of fish are imported each year.

This apparent paradox is explained by the fact that the Australian fishing industry has consistently over-exploited some sources of supply and under-exploited others.

Thus, on the one hand, the fisheries in the estuaries of the Australian coasts (the so-called estuarine fisheries) and those offshore for fish that dwell on the bottom of the sea (the demersal fisheries) have frequently been overfished with a consequent diminution of stocks. On the other hand, those species of fish which dwell near the surface of the sea (the pelagic species) have barely been exploited at all.

It is anticipated that the greatest future development of the Australian fishing industry will take place in the pelagic fisheries. However, no great contribution to the supplies of fresh fish can be expected from this source since most of the pelagic species caught are canned or processed.

An increase in the supply of fresh fish available to the Australian consumer will therefore have to come largely from an expansion of the estuarine and demersal fisheries. In view of the over-exploitation of existing estuarine and demersal fisheries, such an expansion will require the development of new fishing areas.

While it is known that promising fishing grounds exist to the south and north of Australia, it appears that the trawling grounds of the Great Australian Bight are the most suitable for development.

2. **Fishing Areas.**—The principal fishing areas at present are the coastal lakes, streams, estuaries and beaches, from Cairns in Queensland to Ceduna in South Australia, and from Esperance to Geraldton in Western Australia. For the most part, these fishing grounds are associated with the coastal streams. The demersal grounds fall into two classes—(a) the reefs from which cod, snapper, etc. are taken; and (b) the grounds from which flathead, morwong, etc., are taken. The reefs extend intermittently from northern Queensland around the southern part of the continent to Shark Bay in Western Australia. The flathead grounds lie on the continental shelf off south-east Australia, chiefly from Crowley Head to south of Cape Everard and further off the east Tasmanian coast from Babel Island southwards to Storm Bay. Other demersal grounds exist in the Great Australian Bight but would require large modern trawlers for commercial exploitation. The demersal shark grounds lie principally in Bass Strait and on the continental shelf off eastern South Australia. Other grounds have been located off southern Western Australia.

The grounds of existing pelagic fisheries include that for the Spanish mackerel off the north-eastern coast from about Coff's Harbour to Cairns and that for barracouta in Bass Strait and off eastern Tasmania. Jack mackerel is found in the waters of eastern Tasmania, the south-east coast of New South Wales, and Western Australia. Tuna is now being taken in commercial quantities on the New South Wales and South Australian coasts.

Of the crustaceans exploited in Australia, crayfish are the most important and are taken on reefs of the continental shelf in the waters of all southern States, the fishery extending (with a major interruption in the Bight) from Port Macquarie in New South Wales to Geraldton in Western Australia. Considerable development has taken place in the crayfish fisheries, particularly in South Australian and Western Australian waters, owing to the opening up of markets in the United States of America for frozen crayfish tails. Crabs of various species are found in practically all coastal waters. Prawns are taken in the temperate waters of Queensland and New South Wales.

In the Mollusc group, edible oysters are found chiefly in the temperate waters of Queensland, New South Wales and Victoria. Some cropping of natural resources takes place in Queensland, but the principal cultivation grounds are found in New South Wales. Until 1956, scallops were taken commercially in Tasmanian waters only, but since then they have been taken also in Queensland and Western Australia.

Pearlshell is fished from Cooktown in Northern Queensland, and from Thursday Island round the north coast of Australia to Exmouth Gulf in Western Australia. Trochus shell is obtained from Mackay in Queensland round the north coast to King Sound in Western Australia.

Whales emigrating from Antarctic waters to their breeding grounds in the warmer waters of low latitudes pass up both the western and eastern coasts of Australia, returning to the Antarctic in the spring. Two whaling stations operate in Western Australia (Babbage Island near Carnarvon and Cheynes Beach near Albany), one in New South Wales (Byron Bay) and one in Queensland (Moreton Island). The company operating at Byron Bay (New South Wales) also operates a station at Norfolk Island.

**3. Fishing Boats and Equipment.**—The fishing equipment includes almost every possible type of gear, and appropriate boats are employed. The on-shore equipment includes mesh-nets, trawl-nets, and traps of various types. The demersal reef fishery is worked with traps, hand lines and long lines. The demersal flathead fishery is worked by both otter trawl (with Vigneron-Dahl gear) and Danish seine; in addition, some hand-lining is carried out. The demersal shark fishery is worked by long lines. The pelagic mackerel fishery employs trolling gear with lures of various types, while the pelagic barracouta fishery employs principally barbless jigs. Tuna is taken by trolling and, more recently, by pole fishing with live bait.

The boats for the on-shore fisheries are almost invariably small vessels fitted with low-power petrol engines. The vessels working the reefs are larger (up to 50 feet) and have more power. The otter trawl vessels are steam trawlers, and the Danish seine vessels are 40 to 70 feet in length with diesel engines. The shark boats have diesel power and range from 35 to 50 feet in length.

**4. Administration.**—The fisheries within the three-mile limit are administered by State Departments while the Commonwealth Fisheries Office, a division of the Department of Primary Industry, develops and administers fisheries in extra-territorial waters and co-ordinates fisheries administration.

The administration of the fisheries was discussed in greater detail in Official Year Book No. 41, page 844, and in earlier issues.

## § 2. Development and Present Condition of the Fishery.

**1. Fisheries Proper.**—(i) *General.* The development of Australian fisheries has almost invariably followed the same sequence at each centre. The earliest fisheries were on-shore, followed by demersal reef fishing using long lines. Trawling operations have followed line fishing in suitable areas and more recently the exploitation of pelagic fisheries has commenced.

Until about 1900, the expansion of the industry consisted chiefly of the extension of on-shore and demersal fishing with long lines into areas previously unworked. Barracouta was fished in Tasmanian waters at least by 1880, if not earlier, although the main development of this fishery occurred towards the end of the 1939–45 War and in later years to meet demands for canned fish.

The first major development of the industry came with the institution of trawling operations off the New South Wales coast in 1918 by the New South Wales Government. The State enterprise failed, but the fishery was found very profitable by private enterprise. In 1936, the use of Danish seine vessels began and the fleet of these vessels rapidly expanded, and in 1946 (after the return of vessels requisitioned in war-time) a peak was reached when thirteen steam trawlers and 120 Danish seine vessels were licensed. The total catch of trawled fish in 1946-47 was 16,000,000 lb. Of the species taken by the trawl fishery, tiger flathead, morwong, and nannygai are the most important and of these, flathead may be regarded as the prime fish and commands a higher price. Since 1947, the composition of the catch has changed, because of depletion of the flathead stocks, and the lower-priced fish have become a larger proportion of the catch. In 1957-58, four steam trawlers (all based at Sydney but fishing right down the coast to Bass Strait) and a considerably larger number of Danish seine vessels in New South Wales and Victoria were engaged in the trawl fishery.

In Queensland waters, since 1930, the Spanish mackerel has been taken by line fishermen, operating in off-shore waters out to the Barrier Reef between Gladstone and Cairns.

In 1930 also, fishing for school (snapper) shark commenced in south-eastern waters, particularly off the Victorian and Tasmanian coasts. This fishery rapidly extended its area of operations, and in 1957-58 the catch of edible sharks was 8,241,000 lb. live weight. Great impetus was given to the fishery during the war years by the demand for livers for fish oil production for medicinal purposes. Demand eased with the return of cod-liver oil and availability of synthetic vitamin "A". The shark fishery is still important, however, as the flesh, which is sold as "flake", brings substantial prices, mainly in Melbourne.

As far as pelagic fisheries are concerned, pilchards occur in the southern waters of Australia from Port Stephens to the south-west of Western Australia and also as far north as Moreton Bay. Commercial catches have been made with lampara nets and to a lesser extent with purse seines. Anchovies are caught in Port Phillip Bay and also in Lakes Entrance and are used for processing. Sprats in Tasmanian waters are caught in payable quantities, though there is usually some difficulty in finding a market for them. Jack mackerel have been caught in commercial quantities off the east coast of Tasmania and off Eden in New South Wales.

The growth of the Australian tuna fishing industry has been substantial in recent years. Before the 1939-45 War, tuna was taken only in small quantities but in 1950 the Commonwealth Government chartered the American-owned clipper *Senibua* and it was demonstrated that tuna could be caught in commercial quantities using the method of pole fishing with live bait. Since then, the catch has increased considerably and it amounted to 3,231,000 lb. in 1957-58. Practically all tuna in Australia is canned and is possibly the only Australian fish which can produce a canned product equal to oversea high quality packs.

Southern bluefin tuna occurs all along the southern coastline of the continent. In addition, albacore, yellowfin, striped (skipjack) and northern bluefin tuna occur, but the taking of these fish has not been developed.

(ii) *Production.* The statistics of production published in this chapter are in terms of "live" or "gross" weights. Live weights are calculated from recorded weights using conversion factors which allow for the fact that the weights of fish reported are frequently in a gutted, headed and gutted, or otherwise reduced condition. Publication on a live weight basis has been made possible in recent years largely as a result of the efforts of the Commonwealth Fisheries Office.

In interpreting Australian fisheries statistics, allowance should be made for the incomplete coverage. Returns are collected in most States from licensed professional fishermen only, and as a result the published totals fall short of total fish production to the extent of the catch by amateur fishermen, the commercial catch by persons not licensed as professional fishermen and unrecorded catch by professional fishermen.

Production by States for the years 1953-54 to 1957-58 is shown in the following table on a live weight basis.

**RECORDED PRODUCTION OF FISH.**  
(ESTIMATED LIVE WEIGHT.)  
(<sup>'000</sup> lb.)

State or Territory.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
New South Wales .. ..	32,332	26,441	23,062	28,992	27,925
Victoria (a) .. ..	13,820	13,833	10,826	14,136	13,348
Queensland .. ..	10,525	9,368	9,668	9,447	9,034
South Australia .. ..	8,317	8,154	7,328	9,688	9,591
Western Australia .. ..	10,913	9,393	9,768	9,545	9,783
Tasmania (a) .. ..	2,821	3,115	2,545	3,416	2,177
Northern Territory .. ..	100	118	101	179	160
<b>Australia .. ..</b>	<b>78,828</b>	<b>70,422</b>	<b>63,298</b>	<b>75,403</b>	<b>72,018</b>

(a) Catch by Victorian fishermen in Tasmanian waters is included in Victoria.

In the following table, total Australian recorded production of fish by species as they are commonly known is shown by States in terms of estimated live weight for the years 1956-57 and 1957-58.

**FISH: RECORDED PRODUCTION BY SPECIES.**  
(ESTIMATED LIVE WEIGHT.)  
(<sup>'000</sup> lb.)

Species.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
1956-57.								
Mullet .. ..	4,603	578	4,269	650	1,131	13	..	11,244
Australian Salmon .. ..	3,256	3,621	..	900	4,314	73	..	12,164
Shark .. ..	1,792	a 2,568	25	3,175	359	(a) 519	..	8,438
Flathead .. ..	2,904	1,810	234	..	25	42	..	5,015
Barracouta .. ..	154	2,887	..	..	1	2,426	..	5,468
Tuna .. ..	1,683	35	2	490	14	38	..	2,262
Snapper .. ..	1,803	83	135	353	1,035	..	18	3,427
Morwong, Jackass Fish, Perch, Queen Snapper .. ..	3,725	155	..	..	4	11	..	3,895
Whiting .. ..	151	194	472	1,400	463	..	..	2,680
Leatherjacket .. ..	1,838	18	8	..	21	..	..	1,885
Ruff, Tommyruff, Sea Herring .. ..	..	153	..	750	1,015	..	..	1,918
Garfish .. ..	361	377	129	650	50	66	..	1,633
Other Species .. ..	6,722	1,657	4,173	1,320	1,113	228	161	15,374
<b>Total .. ..</b>	<b>28,992</b>	<b>a 14,136</b>	<b>9,447</b>	<b>9,688</b>	<b>9,545</b>	<b>a 3,416</b>	<b>179</b>	<b>75,403</b>
1957-58.								
Mullet .. ..	5,009	1,053	3,611	560	1,322	11	..	11,566
Australian Salmon .. ..	3,010	2,274	..	1,014	4,131	132	..	10,561
Shark .. ..	1,984	a 3,065	..	1,944	401	(a) 847	..	8,241
Flathead .. ..	2,492	1,289	258	..	25	44	..	4,108
Barracouta .. ..	13	2,977	..	..	..	913	..	3,903
Tuna .. ..	1,930	62	..	1,218	9	12	..	3,231
Snapper .. ..	1,612	130	134	388	864	..	16	3,144
Morwong, Jackass Fish, Perch, Queen Snapper .. ..	2,914	179	..	..	3	7	..	3,103
Whiting .. ..	228	218	469	1,500	585	..	..	3,000
Leatherjacket .. ..	1,609	13	2	..	34	(b)	..	1,658
Ruff, Tommyruff, Sea Herring .. ..	..	283	..	410	870	..	..	1,563
Garfish .. ..	237	222	126	468	48	38	..	1,139
Other Species .. ..	6,887	1,583	4,434	2,089	1,491	173	144	16,801
<b>Total .. ..</b>	<b>27,925</b>	<b>a 13,348</b>	<b>9,034</b>	<b>9,591</b>	<b>9,783</b>	<b>a 2,177</b>	<b>160</b>	<b>72,018</b>

(a) Catch by Victorian fishermen in Tasmanian waters is included in Victoria.

(b) Less than 500 lb.

2. Crustaceans and Molluscs.—Crayfish are taken (in pots) in all States other than Queensland. Cray fisheries have developed greatly since the 1939–45 War to take advantage of the market in the United States of America for frozen crayfish tails, the total catch increasing from approximately 3 million lb. in 1945–46 to 22.0 million lb. in 1957–58. Of the total catch in 1957–58, Western Australia produced 13.3 million lb.

Prawns are taken by otter trawl in the waters of New South Wales, Queensland and Western Australia. Prawns have been found in considerable quantity in the ocean waters of northern New South Wales and southern Queensland. An important development is anticipated with improvement of handling and distribution and opening up of overseas markets.

Initially the Australian oyster fisheries depended solely upon the harvesting of naturally grown stock in littoral and submarine areas. However, the stocks soon deteriorated and attention was turned to methods of cultivation. This is carried on mainly in New South Wales where there has been constant improvement in methods, and the present technique in certain areas is highly efficient. The production (in-shell) for Australia was 10,310,000 lb. in 1956–57 and increased to 10,617,000 lb. in 1957–58. Scallops are taken by dredge in the D'Entrecasteaux Channel in Tasmania and by trawl in Hervey Bay, Queensland. In 1957–58, a small quantity was also taken in Western Australia.

Details of production of crustaceans and molluscs are shown by States in the tables below on a gross (in-shell) weight basis for the years 1956–57 and 1957–58.

## RECORDED PRODUCTION OF CRUSTACEANS AND MOLLUSCS.

(GROSS (IN-SHELL) WEIGHT.)

('000 lb.)

Item.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1956–57.							
<i>Crustaceans—</i>							
Crayfish ..	480	(a) 1,164	..	4,385	10,763	(a) 2,104	18,896
Crabs ..	123	..	701	..	11	..	835
Prawns ..	2,386	(b)	2,500	..	189	..	5,075
Other(c) ..	..	..	9	..	..	..	9
<i>Total</i> ..	<i>2,989</i>	<i>(a) 1,164</i>	<i>3,210</i>	<i>4,385</i>	<i>10,963</i>	<i>(a) 2,104</i>	<i>24,815</i>
<i>Molluscs—</i>							
Oysters ..	9,695	42	154	..	46	373	10,310
Scallops ..	..	..	1,200	..	..	5,874	7,074
Other(d) ..	..	47	45	..	14	..	106
<i>Total</i> ..	<i>9,695</i>	<i>89</i>	<i>1,399</i>	<i>..</i>	<i>60</i>	<i>6,247</i>	<i>17,490</i>
1957–58.							
<i>Crustaceans—</i>							
Crayfish ..	552	(a) 1,230	..	4,460	13,327	(a) 2,399	21,968
Crabs ..	127	..	664	..	35	..	826
Prawns ..	1,520	20	3,000	..	147	..	4,687
Other(c) ..	..	..	23	..	..	..	23
<i>Total</i> ..	<i>2,199</i>	<i>(a) 1,250</i>	<i>3,687</i>	<i>4,460</i>	<i>13,509</i>	<i>(a) 2,399</i>	<i>27,504</i>
<i>Molluscs—</i>							
Oysters ..	10,252	117	147	..	55	46	10,617
Scallops ..	..	..	44	..	12	4,163	4,219
Other(d) ..	..	48	74	..	12	2	136
<i>Total</i> ..	<i>10,252</i>	<i>165</i>	<i>265</i>	<i>..</i>	<i>79</i>	<i>4,211</i>	<i>14,972</i>

(a) Catch by Victorian fishermen in Tasmanian waters is included in Victoria.

(b) Less than

500 lb.

(c) Shovel-nosed lobster.

(d) Includes squid and abalone.

3. *Pearl-shell and Trochus-shell*.—The industry, which ceased operations on Japan's entry into the war in December, 1941, did not resume on a commercial basis at Queensland centres until late in 1945, and at Western Australian centres until 1946, while operations off the Northern Territory coast were not resumed until 1948.

Before the war, a large proportion of the key men were Japanese; the others included Malays, Chinese, Koepangers, Filipinos, Papuans and Torres Strait Islanders. On the resumption of operations without the Japanese, the labour available was, with few exceptions, inefficient. The expansion of the industry at Darwin has been retarded by the fact that the key men lack the local knowledge acquired by the Japanese. Western Australian centres also suffered from lack of skilled labour. In 1953, the Commonwealth permitted the employment at Broome, under certain conditions, of 35 Japanese divers, tenders and engine-drivers. Queensland, with a *more ready source of labour from the Torres Strait Islands and the mainland*, was able to expand its fishing more rapidly, and in the 1949 season achieved its second highest pearl-shell production on record.

In 1953, a Japanese fleet, which had been pearling in the Arafura Sea while a Japanese Mission in Canberra was discussing a fisheries agreement with the Australian Government, moved into an area in which it had been asked not to fish. This action was regarded as having broken off the negotiations, and proclamations were issued in September, 1953, declaring Australia's sovereign rights over the natural resources of the sea bed and sub-soil of the Continental Shelf adjoining Australia, its territories and the Trust Territory of New Guinea. In September, the Pearl Fisheries Act 1952–53, providing for licensing and control of pearling, was brought into operation.

Japan disputed Australia's right to apply this legislation to foreign ships, and Australia agreed to refer the dispute to the *International Court of Justice on condition that meantime Japanese pearling in Australian waters would be conducted in conformity with the Australian Government's policy of regulation and conservation, and that Japan would abide by the Court's decision*. On these conditions, a Japanese pearling fleet has operated in prescribed waters since 1954.

Australian production of pearl-shell and trochus-shell was 4,102,000 lb. and 1,229,000 lb. respectively in 1957–58. In addition, Japanese pearlers took 1,572,000 lb. of pearl-shell in Australian waters.

Reference to inquiries into the pearl-shell fishing industry by a Royal Commission in 1912, and by the Tariff Board in 1935, is made on page 1031 of Official Year Book No. 37

### § 3. Marketing and Distribution.

1. *Marketing*.—Most of the fish taken in Australian waters is sold in the metropolitan markets, although many of the fisheries are considerable distances from these centres. The arrangements for marketing of fresh fish vary from State to State and in some cases the State Government exercises a certain amount of control.

In New South Wales, marketing of fish is controlled by the Chief Secretary and the bulk of the State's catch is sold through the Sydney market, owned by municipal authorities but controlled by the Chief Secretary. A small branch market is operated in Wollongong, and the nineteen fishermen's co-operatives also market fish in their own regions. By law, all fish produced must be sold through a recognised market, i.e. Sydney, Wollongong or the co-operatives.

In Victoria, there are no fish marketing regulations, and most of the catch, as well as considerable quantities of interstate fish, is sold at the main Melbourne market owned and controlled by the City of Melbourne. In addition, the eight fishermen's co-operatives engage in the wholesale and retail sale of fish within their own areas.

In Queensland, the Government Fish Board controls all marketing and in addition to the main Brisbane market, regulates the sale of fish through eighteen coastal markets and eight agencies extending along the coast from Coolangatta to Port Douglas.

In South Australia, the Adelaide market is owned and operated by the South Australian Fishermen's Co-operative. Of the total State catch, approximately 80% is handled by the Co-operative, the balance being sold privately either to local or interstate fish agents.

In Western Australia, the Perth market is established as a government instrumentality and handles most of the fish for sale in the main metropolitan market. Besides this, there is another Government market in Fremantle. Both of these markets are leased to private individuals, who have the right to conduct auctions subject to certain Government supervision. Outside the main metropolitan area, marketing is conducted on a more or less private basis.

In Tasmania, there is no established market and the sale of fish is conducted on a private basis with fish agents playing a considerable part in the disposal of fish locally and to the mainland.

2. **Consumption of Fish.**—Particulars of the estimated supplies of fish, crustaceans and molluscs available for consumption per head of population, in terms of edible weight, are included in the table below for the years 1953-54 to 1957-58. For the purpose of compiling this table, the non-commercial fish catch has been estimated at ten per cent. of the recorded catch.

Fish is not a staple item in the diet of Australians and the consumption of fisheries' products remained at the comparatively low level of 9.8 lb. per head in 1957-58, more than half of this quantity being fresh fish.

**ESTIMATED SUPPLIES OF FISH, ETC., AVAILABLE  
FOR CONSUMPTION, AUSTRALIA.  
(LB. EDIBLE WEIGHT PER HEAD PER ANNUM.)**

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<b>Fresh or Frozen—</b>					
Fish .. .. .	5.7	5.2	4.9	5.1	5.3
Crustaceans and Molluscs .. .. .	0.8	1.2	1.0	0.9	0.8
Cured (incl. Smoked and Salted) .. .. .	0.8	1.0	1.1	0.5	1.3
<b>Canned—</b>					
Australian Origin .. .. .	0.8	0.6	0.6	0.8	0.6
Imported .. .. .	1.7	2.2	2.5	1.7	1.8
<b>Total .. .. .</b>	<b>9.8</b>	<b>10.2</b>	<b>10.1</b>	<b>9.0</b>	<b>9.8</b>

3. **Processing, including Canning.**—The equipment for handling fish was rather inadequate in the past, but, in most States, cold storage facilities have been improved and increased in recent years. In Queensland and New South Wales, particularly, the depots which have been established at fishing ports have been equipped with cold storage space. In several States, there has been a development of establishments equipped for snap freezing of fish, in particular the freezing of crayfish tails, prawns and scallops for export. A number of vessels have been equipped with freezing plants to process crayfish at sea.

In all States, there has been a development of facilities for light processing of fish.

Reference to the production of processed fish and number of factories operating will be found in § 5, para. 4, page 1009. Considerable expansion has taken place in the industry, particularly since 1945-46. In 1938-39, 1,472,592 lb. of fish valued at £29,581 were processed, whereas in 1957-58, 9,293,321 lb., of whole fish and 5,600,326 lb. of headed and/or gutted fish valued at £268,610 and £231,220 respectively were processed.

4. **By-products.**—Processing of offal for fish-meals, etc., has been established in certain States. The processing of livers for vitamin-rich oils was undertaken in several States but, as mentioned previously, production has fallen to a low level in recent years.

#### § 4. Inquiries and Research.

1. **General.**—The Australian fishing industry has been the subject of a number of official inquiries seeking an explanation of the very slow rate of development and the unfortunate conditions prevailing within the industry as well as the paucity of supplies available to the public. Details of the inquiries undertaken, the recommendations arising from them, and subsequent developments will be found in Official Year Book No. 38, page 1082.

2. **Commonwealth Scientific and Industrial Research Organization, Division of Fisheries and Oceanography.**—Details of the establishment, organization and functions of the Division of Fisheries of the Commonwealth Scientific and Industrial Research Organization will be found in Official Year Book No. 38, page 1083. The scientific basis on which the work of the Division is carried out has now been widened, and, to provide for this, the name of the Division has been amended to "Division of Fisheries and Oceanography".

Research carried out by the Division has assisted greatly in the development and preservation of Australian fisheries. Details may be found in Official Year Book No. 41, page 848, and in previous issues.

3. **Commonwealth Fisheries Office.**—The Commonwealth Fisheries Office, a division of the Department of Primary Industry, arose out of a Tariff Board recommendation in

1941, following a public inquiry into the fishing industry, that a Commonwealth developmental authority should be established. Details of the establishment, organization and functions of the office will be found in Official Year Book No. 38, page 1084.

In accordance with the Tariff Board report, scientific research, as distinct from developmental and administrative functions, was left to the Commonwealth Scientific and Industrial Research Organization, which had established a Division of Fisheries for this purpose in 1937.

The Commonwealth is responsible for extra-territorial waters, whaling, pearling, rehabilitation of ex-servicemen in the fishing industry, fishery training schools, commercial development of fisheries, promotion of uniform conditions governing catches of various species of fish, economic research statistics, information and publications.

4. **Fisheries Development Trust Account.**—In early 1956, the assets of the Australian Whaling Commission, an authority set up by the Commonwealth Government in 1949, were disposed of to private interests. The finance derived from the sale, authorized by the Fishing Industry Act 1956, was paid into a fund known as the Fisheries Development Trust Account. Provision was made in the Act for the moneys to be used for the purposes of developing the fishing industry through research, direct financial assistance, the development of particular fisheries, training schemes and the dissemination of information and advice through various publications and the press.

An Advisory Committee on fisheries development, which comprises representatives of the Commonwealth Departments of Primary Industry, Trade, Treasury, and the Commonwealth Scientific and Industrial Research Organization, has been formed to advise the Minister on specific projects for fisheries development.

Projects which have so far been approved include:—

(i) The purchase of a modern diesel trawler to test the commercial potentialities of trawling in the Great Australian Bight. This area is so far unexploited, although, in the past, scientific and commercial fishing operations have revealed a vast fishing area.

(ii) The chartering of a vessel to survey the prawn resources off the east coast of Australia. This survey met with initial success with the discovery of large prawn resources off Fraser Island (Queensland).

(iii) A survey of the pilchard resources off the New South Wales coast, with a view to ascertaining whether pilchards can be taken in commercial quantities.

5. **North Australia Development Committee.**—In 1946, the North Australia Development Committee recommended that a hydrological and oceanographical survey should be made of North Australian waters. It also suggested that a biological survey should be made of the pearl oyster with particular reference to the possibility of instituting pearl culture.

Further reference to these and other recommendations may be found in Official Year Book No. 41, page 848.

The C.S.I.R.O. Division of Fisheries subsequently set up a biological research station on Thursday Island, mainly for the pearl and pearl-shell investigations. Since 1951, a research vessel has been based on Thursday Island and is used for diving, biological and hydrological work.

6. **Whaling.**—The whaling industry was re-established in Australia in 1949 with operations being carried out from shore-based stations. In this year, a station began operating at Point Cloates, Western Australia. The Australian Whaling Commission, established in 1949, built a station at Babbage Island near Carnarvon, Western Australia, and began operations towards the end of the 1950 season. In 1956, legislation was passed to dissolve the Commission and its assets were sold to the private company operating at Point Cloates. The operations of this company were transferred to Babbage Island and the Point Cloates station was closed in 1956. Other stations commenced operations in the following years: Cheynes Beach, near Albany (Western Australia) in 1952; Moreton Bay (Queensland) in 1952; Byron Bay (New South Wales) in 1954 and Norfolk Island in 1956.

Each of the stations operating is allowed a quota (in terms of humpback whales) imposed by the Minister for Primary Industry, acting on the advice of the Director of Fisheries who represents Australia on the International Whaling Commission which controls whaling throughout the world. This catch quota was first introduced in 1951 and aims at conserving the stock of whales in order that the industry might continue on a stable basis.

Sperm whaling, which commenced in 1955 on an exploratory basis, is still being carried out on the Western Australian coast but the catch of this species is not subject to the quotas imposed and the results of these operations are not reflected in the table showing statistics of whaling operations which appears in § 5, para. 2, following.

## § 5. The Fishing and Whaling Industry—Statistics.

1. Fisheries.—(i) *Quantity and Gross Value of Take.* Recorded production for all fisheries is shown in the following tables.

## RECORDED FISHERIES PRODUCTION: QUANTITY AND GROSS VALUE OF TAKE.

Particulars.	Unit.	N.S.W.	Vic.(a)	Qld.	S.A.	W.A.	Tas.(a)	N.T.	Aust.
1956-57.									
<i>Fish—</i>									
Estimated Live Weight ..	'000 lb.	28,992	14,136	9,447	9,688	9,545	3,416	179	75,403
Gross Value ..	£'000.	2,145	1,203	622	943	578	192	27	5,710
<i>Crustaceans—</i>									
Gross Weight ..	'000 lb.	2,989	1,164	3,210	4,385	10,963	2,104	..	24,815
Gross Value ..	£'000.	576	176	401	506	1,380	245	..	3,284
<i>Molluscs—</i>									
In-shell Weight ..	'000 lb.	9,695	89	1,399	..	60	6,247	..	17,490
Gross Value ..	£'000.	636	6	46	..	5	171	..	864
<i>Shark Livers—</i>									
Gross Weight ..	'000 lb.	..	(b) 3	..	175	..	..	..	(b) 178
Gross Value ..	£'000.	..	(b)(c)	..	7	..	..	..	(b) 7
<i>Pearl-shell(d)(e)—</i>									
Weight ..	'000 lb.	..	..	1,127	..	2,012	..	585	3,724
Gross Value ..	£'000.	..	..	276	..	584	..	146	1,006
<i>Trochus-shell(d)—</i>									
Weight ..	'000 lb.	..	..	1,900	..	11	..	..	1,911
Gross Value ..	£'000.	..	..	356	..	1	..	..	357

1957-58.

<i>Fish—</i>									
Estimated Live Weight ..	'000 lb.	27,925	13,348	9,034	9,591	9,783	2,177	160	72,018
Gross Value ..	£'000.	2,016	1,093	706	671	631	83	21	5,221
<i>Crustaceans—</i>									
Gross Weight ..	'000 lb.	2,199	1,250	3,687	4,460	13,509	2,399	..	27,504
Gross Value ..	£'000.	479	189	503	558	1,744	300	..	3,773
<i>Molluscs—</i>									
In-shell Weight ..	'000 lb.	10,252	165	265	..	79	4,211	..	14,972
Gross Value ..	£'000.	673	12	15	..	5	123	..	828
<i>Shark Livers—</i>									
Gross Weight ..	'000 lb.	..	(b) 16	..	95	..	26	..	(b) 137
Gross Value ..	£'000.	..	(b) 1	..	4	..	2	..	(b) 7
<i>Pearl-shell(d)(e)—</i>									
Weight ..	'000 lb.	..	..	1,131	..	2,218	..	753	4,102
Gross Value ..	£'000.	..	..	255	..	605	..	135	995
<i>Trochus-shell(d)—</i>									
Weight ..	'000 lb.	..	..	1,207	..	22	..	..	1,229
Gross Value ..	£'000.	..	..	181	..	3	..	..	184

(a) Catch by Victorian fishermen in Tasmanian waters is included in Victoria. (b) Incomplete.  
 (c) Less than £500. (d) Western Australia, season ended preceding December. Queensland and Northern Territory, season ended preceding January. (e) Excludes pearl-shell taken by Japanese pearl-operators in Northern Territory Waters.

## RECORDED FISHERIES PRODUCTION: QUANTITY AND GROSS VALUE OF TAKE, AUSTRALIA.

Particulars.	Unit.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>Fish—</i>						
Estimated Live Weight ..	'000 lb.	78,828	70,422	63,298	75,403	72,018
Gross Value ..	£'000.	4,716	4,632	4,626	5,710	5,221
<i>Crustaceans—</i>						
Gross Weight ..	'000 lb.	22,265	27,668	25,474	24,815	27,504
Gross Value ..	£'000.	2,510	2,929	2,873	3,284	3,773
<i>Molluscs—</i>						
In-shell Weight ..	'000 lb.	13,570	15,931	15,708	17,490	14,972
Gross Value ..	£'000.	641	829	792	864	828
<i>Shark Livers—</i>						
Gross Weight ..	'000 lb.	254	170	215	178	137
Gross Value ..	£'000.	34	22	25	7	7
<i>Pearl-shell(b)(c)—</i>						
Weight ..	'000 lb.	2,337	2,489	2,913	3,724	4,102
Gross Value ..	£'000.	595	647	771	1,006	995
<i>Trochus-shell(b)—</i>						
Weight ..	'000 lb.	3,057	2,784	2,114	1,911	1,229
Gross Value ..	£'000.	260	350	346	357	184

(a) Incomplete. (b) See note (d) to previous table. (c) See note (e) to previous table.

(ii) *Boats and Men Engaged, etc.* The following tables show particulars of boats and equipment used and persons engaged in the various fisheries. Details relating to oyster leases are also shown.

**FISHERIES: BOATS AND EQUIPMENT IN USE AND PERSONS ENGAGED, ETC.**

Particulars.	Unit.	N.S.W.	Vic.	Qld.	S.A.	W.A. (a)	Tas.	N.T.	Aust.
1956-57.									
<i>General Fisheries(b)—</i>									
Boats Engaged ..	No.	2,239	703	4,857	1,470	706	472	28	10,475
Value of Boats and Equipment ..	£'000	1,557	851	1,627	595	1,562	840	7	7,039
Persons Engaged ..	No.	2,201	930	10,731	5,550	1,285	958	52	21,707
<i>Edible Oyster Fisheries—</i>									
Boats Engaged ..	No.	980	4	47	..	1	(c)	..	d 1,032
Value of Boats and Equipment ..	£'000	130	(e)	30	..	3	(c)	..	(d) 163
Persons Engaged ..	No.	719	5	146	..	4	(c)	..	(d) 874
Leases Granted ..	"	5,154	5	293	..	..	..	..	5,452
Length of Foreshore in Leases ..	'000 yds	954	16	(f)	..	..	..	..	(d) 970
Area of Offshore Leases	Acre	6,037	..	..	..	..	..	..	6,037
<i>Pearl, Pearl-shell and Trochus-shell Fisheries—</i>									
Boats Engaged ..	No.	..	..	98	..	42	..	10	150
Value of Boats and Equipment ..	£'000	..	..	500	..	251	..	75	826
Persons Engaged ..	No.	..	..	1,155	..	464	..	123	1,742
<i>Total, All Fisheries—</i>									
Boats Engaged ..	No.	3,219	707	5,002	1,470	749	472	38	11,657
Value of Boats and Equipment ..	£'000	1,687	851	2,157	595	1,816	840	82	8,028
Persons Engaged ..	No.	2,920	935	12,032	5,550	1,753	958	175	24,323
1957-58.									
<i>General Fisheries(b)—</i>									
Boats Engaged ..	No.	2,381	699	4,425	1,443	812	458	23	10,241
Value of Boats and Equipment ..	£'000	1,747	903	1,495	610	1,859	850	12	7,476
Persons Engaged ..	No.	1,645	937	9,987	5,998	1,348	907	54	20,876
<i>Edible Oyster Fisheries—</i>									
Boats Engaged ..	No.	1,022	4	44	..	1	(c)	..	d 1,071
Value of Boats and Equipment ..	£'000	141	(e)	26	..	3	(c)	..	(d) 170
Persons Engaged ..	No.	758	5	146	..	4	(c)	..	(d) 913
Leases Granted ..	"	4,738	5	299	..	..	..	..	5,042
Length of Foreshore in Leases ..	'000 yds	877	16	(f)	..	..	..	..	(d) 893
Area of Offshore leases	Acre	5,415	..	..	..	..	..	..	5,415
<i>Pearl, Pearl-shell and Trochus-shell Fisheries—</i>									
Boats Engaged ..	No.	..	..	92	..	48	..	11	151
Value of Boats and Equipment ..	£'000	..	..	442	..	265	..	83	790
Persons Engaged ..	No.	..	..	898	..	482	..	107	1,487
<i>Total, All Fisheries—</i>									
Boats Engaged ..	No.	3,403	703	4,561	1,443	861	458	34	11,463
Value of Boats and Equipment ..	£'000	1,888	903	1,963	610	2,127	850	95	8,436
Persons Engaged ..	No.	2,403	942	11,031	5,998	1,834	907	161	23,276

(a) Year ended preceding December. (b) Excludes edible oyster fisheries (except in Tasmania) but includes crustacean and other mollusc fisheries. (c) Included in General Fisheries. (d) Incomplete; see footnotes to individual States. (e) Less than £500. (f) Not available.

## FISHERIES : BOATS AND EQUIPMENT IN USE AND PERSONS ENGAGED, AUSTRALIA.

Particulars.	Unit.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
<i>General Fisheries(a)—</i>						
Boats Engaged .. .. .	No.	9,877	10,030	10,223	10,475	10,241
Value of Boats and Equipment .. .. .	£'000	5,936	6,240	6,606	7,039	7,476
Persons Engaged .. .. .	No.	18,598	19,685	20,627	21,707	20,876
<i>Edible Oyster Fisheries—</i>						
Boats Engaged .. .. .	No.	978	1,104	810	(b)1,032	(b)1,071
Value of Boats and Equipment(b) .. .. .	£'000	129	123	115	163	170
Persons Engaged .. .. .	No.	700	922	824	(b) 874	(b) 913
Leases Granted .. .. .	"	5,634	5,660	5,474	5,452	5,042
Length of Foreshore in Leases(c) .. .. .	'000 yds.	1,020	1,043	1,127	970	893
Area of Offshore Leases .. .. .	Acre	6,296	6,547	5,251	6,037	5,415
<i>Pearl, Pearl-shell and Trochus-shell Fisheries—</i>						
Boats Engaged .. .. .	No.	124	127	136	150	151
Value of Boats and Equipment .. .. .	£'000	502	564	727	826	790
Persons Engaged .. .. .	No.	1,386	1,506	1,571	1,742	1,487
<i>Total, All Fisheries—</i>						
Boats Engaged .. .. .	No.	10,979	11,261	11,169	11,657	11,463
Value of Boats and Equipment .. .. .	£'000	6,567	6,927	7,448	8,028	8,436
Persons Engaged .. .. .	No.	20,684	22,113	23,022	24,323	23,276

(a) Excludes edible oyster fisheries but includes crustacean and other mollusc fisheries. Includes particulars for Tasmanian edible oyster fisheries except prior to 1956-57, when only Tasmanian particulars of value of boats and equipment were included. (b) Excludes particulars for Tasmania which are included with General Fisheries. (c) Excludes Queensland.

2. Whaling.—The information summarized in the table below was supplied by the Commonwealth Fisheries Office. Details relate to seasons extending from about May to October of each year.

## WHALING STATISTICS, AUSTRALIA AND NORFOLK ISLAND.

Particulars.	Unit.	1954.	1955.	1956.	1957.	1958.
Seasonal Quota(a) .. .. .	No.	2,040	1,840	1,990	1,960	1,960
Whales Taken .. .. .	"	2,039	1,840	1,990	1,961	1,812
Whales Processed .. .. .	"	2,039	1,840	1,990	1,961	1,812
Average Length of Whales Processed .. .. .	ft.	39.8	40.8	41.1	40.7	40.8
Average Oil Production per Whale Processed .. .. .	Barrel b	49.1	51.8	51.6	52.5	54.1
Persons Employed—At Sea .. .. .	No.	114	124	124	140	157
Persons Employed—Ashore .. .. .	"	420	433	396	431	440
Whale Oil Produced—Quantity .. .. .	Barrel b	100,068	95,258	102,366	102,966	97,698
Whale Products—Value .. .. .	£'000	1,960	1,953	2,233	2,205	1,866

(a) In terms of humpback whales. For quota purposes, 1 blue whale is taken as equivalent to 2 fin whales, 2½ humpback whales, 6 sei whales, or 6 bryde whales. (b) 6 barrels = 1 ton.

3. Value of Production.—(i) *Gross and Local Values, 1956-57 and 1957-58.* Although statistics of the value of production of the fishing industry have been on an established basis for some years, attention is drawn to the fact that the actual collection of statistics of the quantity of fish taken presents many difficulties and, consequently, any defects which may occur in the collection must necessarily be reflected in the value of production. Particulars of the value of materials used in the process of production are not available for all States, so the values can only be stated at the point of production, and not on a net basis, as has been done with other industries. Variations in the relative proportions of marketing costs to gross production suggest that complete uniformity in method has not yet been attained.

**GROSS AND LOCAL VALUE OF PRODUCTION: FISHING AND WHALING.**  
(£'000.)

State or Territory.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Place of Production.
1956-57.			
New South Wales .. .. .	3,376	437	2,939
Victoria .. .. .	1,381	203	1,178
Queensland .. .. .	1,777	202	1,575
South Australia .. .. .	1,456	161	1,295
Western Australia .. .. .	2,782	45	2,737
Tasmania .. .. .	609	..	609
Northern Territory .. .. .	173	..	173
<b>Australia .. .. .</b>	<b>11,554</b>	<b>1,048</b>	<b>10,506</b>
1957-58.			
New South Wales .. .. .	3,198	406	2,792
Victoria .. .. .	1,295	190	1,105
Queensland .. .. .	1,752	210	1,542
South Australia .. .. .	1,233	159	1,074
Western Australia .. .. .	3,265	39	3,226
Tasmania .. .. .	508	..	508
Northern Territory .. .. .	156	..	156
<b>Australia .. .. .</b>	<b>11,407</b>	<b>1,004</b>	<b>10,403</b>

(ii) *Local Values, 1934-35 to 1938-39 (Average) and 1953-54 to 1957-58.* In the following table, the local value of fisheries production and the local value per head of population are shown by States for the average of years 1934-35 to 1938-39 and for each of the years 1953-54 to 1957-58. Local value is gross value less marketing costs and is the value at the place of production. Because the value of materials used in the course of production is not available for all States it is not possible to show a comparison of net values.

**LOCAL VALUE OF FISHING AND WHALING PRODUCTION.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
LOCAL VALUE.							
(£'000.)							
Average, 1934-35 to 1938-39 ..	588	159	292	182	229	80	1,530
1953-54 ..	2,642	834	951	1,015	1,867	432	7,741
1954-55 ..	2,739	849	1,275	1,046	2,149	556	(a) 8,727
1955-56 ..	2,684	734	1,471	995	2,406	505	(a) 8,884
1956-57 ..	2,939	1,178	1,575	1,295	2,737	609	(a) 10,506
1957-58 ..	2,792	1,105	1,542	1,074	3,226	508	(a) 10,403

LOCAL VALUE OF FISHING AND WHALING PRODUCTION—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
LOCAL VALUE PER HEAD OF POPULATION.							
(s. d.)							
Average, 1934-35 to 1938-39 ..	4 5	1 9	5 11	6 3	10 0	6 11	4 6
1953-54 ..	15 6	6 10	14 7	25 10	59 2	27 11	17 6
1954-55 ..	15 10	6 10	19 3	25 11	66 3	35 6	(a) 19 2
1955-56 ..	15 3	5 9	21 9	23 10	71 11	31 8	(a) 19 2
1956-57 ..	16 5	8 11	22 10	30 1	80 0	37 4	(a) 22 0
1957-58 ..	15 3	8 2	22 0	24 3	92 4	30 5	(a) 21 4

(a) Includes Northern Territory.

4. **Fish Preserving.**—The attempt to establish the fish preserving industry at the commencement of this century met with little success although a bounty was paid to encourage production. The industry, however, continued to operate, but there was no marked development until about 1945-46 when the production of canned fish amounted to 1,700,000 lb. After that year, production increased considerably and reached a peak of 10,900,000 lb. in 1948-49, but gradually declined in subsequent years to 6,000,000 lb. in 1955-56. Production increased in 1956-57 to 8,273,000 lb. and in 1957-58 it was 7,861,000 lb.

In addition to the canning of fish, other fish products are produced. In 1957-58, these included 439,000 lb. of smoked fish, 1,700,000 lb. of fish paste and considerable quantities of frozen crayfish tails for export and quick-frozen fish for the local market.

In 1939, New South Wales and Tasmania were the only States canning fish, but the industry has since been extended to Victoria, South Australia and Western Australia. Details of production are given in the following table for the years 1938-39 and 1953-54 to 1957-58.

## PRODUCTION OF CANNED FISH(a): AUSTRALIA.

Particulars.	1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Number of factories operating ..	3	11	9	11	13	14
Quantity produced .. lb.	603,302	6,604,587	6,645,552	6,007,570	8,272,749	7,861,147
Value .. £	13,700	838,179	834,090	844,359	1,225,921	1,172,704

(a) Including the canning of fish loaf and crustaceans.

The varieties canned in the several States differ according to the species caught, but separate details for each variety are not available. In New South Wales, Australian salmon and tuna are the principal varieties. Barracouta is of major importance in Victoria and Tasmania, and Australian salmon predominates in South Australia and Western Australia. Herrings are also important in the latter State.

5. **State Revenue from Fisheries.**—The revenue from fisheries during the year 1957-58 was £97,696, compared with £69,190 in 1956-57 and £34,273 in 1938-39. Details by States of the amount collected in 1957-58, with comparable figures for 1956-57 in brackets, are as follows:—New South Wales £33,579 (£31,031); Victoria £5,273 (£4,701); Queensland £36,949 (£14,627); South Australia £5,832 (£5,354); Western Australia £8,989 (£7,468); Tasmania £7,033 (£5,969) and Northern Territory £41 (£40).

## § 6. Oversea Trade in Fishery Products.

NOTE.—Values of Australian overseas trade shown in this section are expressed in £A. f.o.b., port of shipment.

1. Imports of Fish.—Particulars of the imports of fish are shown below for the years 1953–54 to 1957–58 in comparison with 1938–39.

FISH (INCLUDING SHELL FISH): IMPORTS INTO AUSTRALIA.  
(‘000 lb.)

Classification.	1938–39.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
Fresh or Frozen(a) .. ..	9,411	15,768	18,488	19,257	18,799	23,163
Smoked or Dried .. ..	910	5,633	6,774	7,743	3,482	9,698
Salted .. ..	895	1,265	1,377	2,055	910	2,231
Potted or Concentrated (including Extracts) .. ..	1,057	152	155	158	76	148
Canned—						
Herrings .. ..	4,359	6,863	6,781	6,328	4,984	4,581
Salmon .. ..	18,670	3,062	6,484	9,691	5,514	6,761
Sardines and Pilchards .. ..	3,290	4,670	5,718	5,693	4,584	4,381
Crustaceans .. ..	765	464	551	1,053	218	496
Other(b) .. ..	1,819	433	680	496	1,403	898
<b>Total Canned .. ..</b>	<b>28,903</b>	<b>15,492</b>	<b>20,214</b>	<b>23,261</b>	<b>16,703</b>	<b>17,117</b>

(a) Includes Crustaceans and Molluscs.

(b) Includes canned Molluscs.

The value of fish and fish products imported during 1957–58 amounted to £6,146,000, compared with £4,582,000 in 1956–57.

Canned fish (total imports of which in 1957–58 were valued at £3,136,000) accounted for most of the imports. Salmon from Japan and Canada, herrings from the United Kingdom and sardines from Norway and Canada were the chief varieties imported. About 90 per cent. of the fresh fish imported in 1957–58 came from the United Kingdom, the Union of South Africa, New Zealand and Denmark; the potted fish came chiefly from the United Kingdom; and the bulk of the remainder came from South Africa and the United Kingdom.

2. Exports of Fish.—During 1957–58, the exports of fish of Australian origin were as follows:—Fresh or frozen crayfish tails, 5,801,910 lb., £2,488,782, nearly all to the United States of America; other fish (including shell fish) fresh or preserved by cold process, 761,127 lb., £199,962; oysters in shell, 13,328 lb., £1,977; potted or concentrated fish, 3,306 lb., £430; fish preserved in tins, 367,155 lb., £71,010; shell fish in tins, 76,094 lb., £22,636; smoked or dried fish (including salted), 1,200 lb., £308.

3. Exports of Pearl and other Shell.—The exports of pearl, trochus and other shell of Australian origin are shown hereunder for the years 1938–39 and 1953–54 to 1957–58.

PEARL, TROCHUS AND OTHER SHELL: EXPORTS FROM AUSTRALIA.

Article.	1938–39.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
Pearl-shell .. .. cwt.	52,532	23,020	23,924	27,174	32,531	34,781
	£ 244,266	£ 653,797	£ 690,204	£ 836,736	£ 1,034,128	£ 1,031,223
Trochus-shell .. .. cwt.	9,108	47,415	36,414	23,959	17,171	13,200
	£ 34,166	£ 591,511	£ 578,876	£ 524,954	£ 447,514	£ 228,319
Other shell .. .. cwt.	4	5,853	4,938	1,436	985	673
	£ 151	£ 69,283	£ 68,035	£ 32,478	£ 26,228	£ 11,115

## CHAPTER XXVII.

## MINERAL INDUSTRY.

## § 1. The Mineral Wealth of Australia.

1. **Place of Mining in Australian Development.**—Population was first attracted to Australia in large numbers by the discovery of gold in payable quantities. This discovery was thus a significant factor in Australia's early development. In more recent times, the rapid growth of Australia's secondary industries has been associated with considerable expansion in mining for silver-lead-zinc, copper and iron ores, and coal. The value of mineral production, however, has lagged behind that recorded for Australia's large rural industries and in 1956 represented only about 11 per cent. of the net value of production of all primary industries.

2. **Extent of Mineral Wealth.**—The extent of the mineral wealth of Australia, as of any country, is not determined fully at any point of time. Regional and detailed investigations are being carried out by the Commonwealth Bureau of Mineral Resources, Geology and Geophysics, by the Geological Surveys of the State Governments and by the exploration departments of mining companies, but large areas of the country still await geological survey. Important prospects of copper, iron, lead and zinc, oil, uranium ore, bauxite (aluminium ore) and some other minerals have been recorded recently and are being investigated in detail.

3. **Presentation of Mineral Statistics.**—In the preparation of Australian mineral production statistics, the quantities and values of individual minerals produced are reported in terms of the products in the form in which they are dispatched from the locality of each mine. This involves the inclusion in the mining industry of ore-dressing and elementary smelting of metallic minerals (e.g., in the case of gold) and miscellaneous treatment of non-metallic minerals, where these operations are carried out in an associated plant at or near the mine. For example, in the case of a metal mine, the output is recorded as ore when no treatment is undertaken at the mine or as a concentrate where ore-dressing operations are carried out in associated works in the locality of the mine. In addition to the basic quantity data, the plan provides for the reporting of contents of metallic minerals and of contents or average grade of selected non-metallic minerals. Wherever practicable, contents (based on assay) of metallic minerals are shown for each metal which is a "pay-metal" or a "refiners' prize" when present in the particular mineral.

For the purpose of compiling and publishing data relating to employment, value of output, value of production, etc., a detailed statistical classification for the mining industry has been used in Australia since 1950. For the purpose of this classification, the "Mining Industry" includes all mining and quarrying and the recovery of minerals from ore dumps, tailings, etc. As mentioned above, ore dressing and miscellaneous treatment of non-metallic minerals (where these are carried out in an associated plant at or near the mine) are included in the mining industry. However, establishments primarily engaged in smelting and/or refining (including the smelting and refining sections of the large plants operated at Mt. Morgan and Mt. Isa in Queensland and at Mt. Lyell in Tasmania) are omitted and classified to the manufacturing industry. The classification divides the industry into four major groups, namely, Metal Mining, Fuel Mining, Non-metal (excluding Fuel) Mining and Construction Material Quarrying. In the tables, individual minerals are arranged in these four groups.

In the main, the data consist of official statistics of Mines Departments and of the Northern Territory Mines Branch. These statistics have been supplemented, as necessary, by data obtained from the Bureau of Mineral Resources, Geology and Geophysics, the Australian Mines and Metals Association (Inc.) and several other sources. The particulars shown have been compiled as far as practicable on the standardized basis. This has involved some re-arrangement of official statistics published by Mines Departments for some States.

It should be noted that the statistics included in this chapter omit particulars relating to uranium-bearing minerals.

4. **Quantity of Minerals Produced in 1957.**—(i) *Total Quantities.* In the following table, particulars of the quantities of principal minerals produced are shown for each State and the Northern Territory for 1957.

## QUANTITIES OF PRINCIPAL MINERALS PRODUCED, 1957.

Mineral.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Aust. (a)
<b>METALLIC MINERALS.</b>									
Antimony Ore and Concentrate .. ..	ton	(b) 850	2	(c) 988	..	..	..	..	852
Bauxite .. ..	..	3,248	3,471	988	..	..	..	..	7,707
Beryllium Ore .. ..	..	(b) 29	..	(d) 1	15	350	..	..	395
Chromite .. ..	..	..	..	1,737	..	1,312	..	..	3,049
Copper Ore, Concentrate and Precipitate .. ..	..	4,841	..	151,053	39	6,443	52,975	29,479	244,830
Gold Ore, Concentrate, etc. .. ..	..	112	847	..	..	..	..	..	959
Gold—Other Forms(e) .. ..	oz.	17,868	53,307	(f) 150	(f)	(f)	(f)	(f)	(f)
Ilmenite Concentrate .. ..	ton	976	..	150	..	70,029	..	..	71,155
Iron Ore .. ..	'000 tons	..	..	..	3,389	416	..	..	3,805
Lead Ore, Concentrate .. ..	ton	363,709	6	128,836	80	4,180	13,057	..	509,868
Manganese Ore .. ..	..	(b) 1,463	..	1,239	..	73,279	..	1,029	77,010
Pyrite Concentrate .. ..	..	b 14,196	..	25,160	68,169	57,918	63,682	..	229,125
Rutile Concentrate .. ..	..	86,155	..	42,748	..	..	..	..	128,903
Tantalite-Columbite Concentrate .. ..	lb.	..	..	..	..	50,038	..	..	50,038
Tin Concentrate .. ..	ton	(b) 297	(c)	1,189	..	270	1,094	17	2,867
Tungsten Concentrates—	..	..	..	..	..	..	..	..	..
Scheelite Concentrate .. ..	..	(b) 2	..	2	..	..	1,445	..	1,449
Wolfram Concentrate .. ..	..	(b) (c)	..	30	..	..	550	77	657
Zinc Ore and Concentrate .. ..	..	463,953	..	36,868	193	..	55,749	..	556,763
Zircon Concentrate .. ..	..	59,373	..	29,188	..	..	..	..	88,561

## FUEL MINERALS.

Coal, Black—	'000 tons	..	..	69	..	..	2	..	71
Semi-anthracite .. ..	..	..	..	..	..	..	..	..	..
Bituminous .. ..	..	15,376	112	2,475	..	..	266	..	18,229
Sub-bituminous .. ..	..	14	..	157	609	839	..	..	1,619
Total .. ..	..	15,390	112	2,701	609	839	268	..	19,919
Coal, Brown (Lignite) .. ..	..	..	10,741	..	..	..	..	..	10,741

## NON-METALLIC (EXCLUDING FUEL) MINERALS.

Asbestos .. ..	sh. ton	676	..	..	..	13,994	..	..	14,670
Barite .. ..	ton	5,415	..	..	4,223	140	..	..	9,778
Clays(g)—	..	..	..	..	..	..	..	..	..
Brick Clay and Shale .. ..	'000 tons	1,531	926	205	368	417	84	..	3,531
Other .. ..	..	470	150	9	83	30	6	..	748
Diatomite .. ..	ton	4,966	1,201	54	..	..	..	..	6,221
Dolomite .. ..	..	5,137	..	5,493	180,237	60	1,176	..	192,103
Felspar .. ..	..	6,254	..	5	1,565	995	..	..	8,819
Gypsum .. ..	..	101,491	68,647	..	274,945	33,352	..	..	478,435
Limestone .. ..	'000 tons	1,897	846	(h)	1,135	(h)	205	..	4,572
Magnesite .. ..	ton	83,271	..	..	202	..	..	..	83,473
Mica—Muscovite .. ..	lb.	..	..	..	..	..	..	77,313	77,313
Salt .. ..	ton	..	d 70,500	d 15,000	339,396	d 6,000	..	1,243	432,139
Silica (Glass, Chemical, etc.)(g) .. ..	..	137,130	(f)	3,129	13,802	5,693	6,552	(f)	166,306
Talc .. ..	..	1,020	..	..	9,686	3,654	..	..	14,360

## CONSTRUCTION MATERIALS.(g)

Sand .. ..	'000 tons	1,776	1,047	(f)	1,302	..	..	..	4,125
River Gravel and Gravel .. ..	..	..	..	..	..	..	..	..	..
Boulders .. ..	..	1,624	135	(f)	..	..	..	..	1,759
Dimension Stone .. ..	..	115	12	6	42	55	(c)	(f)	230
Crushed and Broken Stone .. ..	..	1,981	5,071	1,542	5,867	635	491	..	15,587
Other (Decomposed Rock, etc.) .. ..	..	11,896	645	(f)	..	5	..	..	12,546

(a) Excludes Australian Capital Territory where production is confined to brick clay mining and construction material quarrying. (b) Dispatches from the mine (or sales) as distinct from production (c) Less than half the unit of quantity shown. (d) Estimated. (e) Bullion, alluvial, retorted gold, etc. (f) Not available. (g) Incomplete. (h) Not available for publication.

(ii) *Contents of Metallic Minerals.* The following table shows the contents of metallic minerals produced in 1957. Further particulars, including data for earlier years, are shown in the several sections dealing with individual minerals later in this chapter.

## CONTENTS OF METALLIC MINERALS PRODUCED, 1957.

Content of Metallic Minerals Produced.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Aust.
Alumina ..	ton	1,354	1,910	494	..	..	..	..	3,758
Antimony ..	..	1,208	1	(a)	..	..	..	..	1,209
Beryllium Oxide (BeO) ..	unit(b)	350	..	10	200	4,007	..	..	4,567
Bismuth ..	lb.	..	..	..	..	..	..	1,344	1,344
Cadmium ..	ton	924	..	..	..	..	55	..	979
Chromic Oxide (Cr <sub>2</sub> O <sub>3</sub> ) ..	..	..	..	869	..	551	..	..	1,420
Cobalt ..	..	68	..	..	..	..	(a)	..	68
Copper ..	..	4,382	..	33,706	2	788	10,984	7,313	57,175
Gold ..	fine oz.	31,043	45,752	63,363	35	849,751	20,027	73,970	1,083,941
Iron ..	'000 tons	..	..	..	(c) 2,203	263	3,087	..	(d) 2,466
Lead ..	ton	266,928	4	50,780	20	3,087	12,445	..	333,264
Manganese (e) ..	..	6,082	..	557	..	33,956	..	..	40,595
Manganese Di-oxide (MnO <sub>2</sub> ) (f) ..	..	385	..	..	..	186	..	668	1,239
Molybdenum Disulphide (MoS <sub>2</sub> ) ..	lb.	..	..	5,236	..	..	..	..	5,236
Monazite ..	ton	47	..	85	..	..	..	..	132
Osmiridium ..	oz.	2	..	..	..	..	66	..	68
Platinum ..	..	17	..	..	..	..	..	..	17
Silver ..	'000 fine oz.	9,969	3	4,274	1	188	1,299	5	15,739
Sulphur(g) ..	ton	207,604	..	56,479	32,721	25,420	51,154	..	373,378
Tantalite-Columbite (Ta <sub>2</sub> O <sub>5</sub> + Nb <sub>2</sub> O <sub>5</sub> ) ..	lb.	..	..	..	..	23,499	..	..	23,499
Tin ..	ton	211	(a)	772	..	182	777	10	1,952
Titanium Oxide (TiO <sub>2</sub> ) ..	..	83,848	..	41,578	..	38,325	..	..	163,751
Tungstic Oxide (WO <sub>3</sub> ) ..	..	1	..	20	..	..	1,339	49	1,409
Zinc ..	..	241,509	..	19,536	97	..	30,440	..	291,582
Zircon ..	..	58,747	..	28,956	..	..	..	..	87,703

(a) Less than half the unit of quantity shown. (b) Unit of 22.4 lb. (c) Estimated. (d) Partly estimated. (e) Content of metallurgical grade ore. (f) Content of manganese ore other than metallurgical grade. (g) Sulphur content of lead and zinc concentrates and pyrite. In addition it was estimated that the sulphur content of spent oxide roasted in Australia was 5,751 tons.

5. Mine Production of Principal Metals and Production of Coal and Sulphur, 1953 to 1957.—Particulars of the mine production of principal metals (i.e., metallic contents of minerals produced) and production of coal and sulphur in the years 1953 to 1957 are shown in the following table. Graphs showing details of the mine production of principal metals and coal from 1930 to 1958 may be found on pages 1037-38.

## MINE PRODUCTION OF PRINCIPAL METALS AND PRODUCTION OF COAL AND SULPHUR, AUSTRALIA.

Particulars.	Unit.	1953.	1954.	1955.	1956.	1957.
Metallic Content of Minerals Produced(a)—						
Copper ..	ton	36,762	41,241	46,192	53,737	57,175
Gold ..	fine oz.	1,075,181	1,117,742	1,049,039	1,029,821	1,083,941
Lead ..	ton	269,344	284,862	295,944	299,485	333,264
Iron(b) ..	..	2,131,865	2,274,330	2,304,165	2,542,826	2,465,523
Silver ..	fine oz.	12,539,152	13,827,038	14,555,412	14,586,197	15,739,439
Tin ..	ton	1,553	2,075	2,017	2,078	1,952
Titanium Oxide (TiO <sub>2</sub> ) ..	..	37,067	43,241	57,494	95,502	163,751
Tungstic Oxide (WO <sub>3</sub> ) ..	..	1,406	1,372	1,482	1,582	1,409
Zinc ..	..	239,324	252,659	256,564	278,082	291,582
Production of—						
Coal—Black ..	..	18,410,845	19,763,039	19,274,751	19,273,834	19,919,096
Brown ..	..	8,257,299	9,331,255	10,112,206	10,559,801	10,740,989
Sulphur(c) ..	..	225,197	254,403	269,071	344,890	379,129

(a) Mine production of metals. (b) Partly estimated. (c) Total sulphur content of lead and zinc concentrates and pyrite produced and of spent oxide roasted, except for years prior to 1956 when sulphur content of lead concentrates was not recorded.

6. Value of Output of Minerals Produced 1953 to 1957.—Particulars of the estimated values of minerals (mine and quarry products) produced during the years 1953 to 1957 are shown in the following table. The values represent the estimated selling value at the mine or quarry of minerals produced during the years concerned.

## VALUE OF MINERALS PRODUCED, AUSTRALIA.

(£'000.)

Mineral.	1953.	1954.	1955.	1956.	1957.
<b>METALLIC MINERALS.</b>					
Copper Ore, Concentrate, etc. . . . .	7,527	9,912	15,018	18,182	13,927
Gold Ore, Concentrate, Other forms, etc.	15,627	15,810	15,536	15,509	16,767
Iron Ore . . . . .	3,666	3,923	4,004	4,449	4,295
Lead and Lead-Silver Ore and Concentrate, etc. . . . .	23,308	27,560	32,308	34,552	28,810
Manganese Ore . . . . .	178	366	192	337	589
Pyritic Ore and Concentrate . . . . .	807	897	1,091	1,023	1,166
Rutile Concentrate . . . . .	1,756	1,597	2,995	6,430	8,577
Tin Concentrate . . . . .	1,329	1,606	1,554	1,599	1,612
Tungsten Concentrates . . . . .	3,067	2,347	3,375	3,332	2,167
Zinc Ore and Concentrate . . . . .	5,171	6,531	7,879	8,215	3,655
Zircon Concentrate . . . . .	197	324	392	604	854
Other Metallic Minerals . . . . .	181	253	179	415	602
<i>Total Metallic Minerals</i> . . . . .	<i>62,814</i>	<i>71,126</i>	<i>84,523</i>	<i>94,647</i>	<i>83,021</i>
<b>FUEL MINERALS.</b>					
Coal, Black . . . . .	52,424	54,884	53,737	52,439	52,279
Coal, Brown . . . . .	3,628	3,945	4,382	4,644	5,228
<i>Total Fuel Minerals</i> . . . . .	<i>56,052</i>	<i>58,829</i>	<i>58,119</i>	<i>57,083</i>	<i>57,507</i>
<b>NON-METALLIC (EXCLUDING FUEL) MINERALS.(a)</b>					
<i>Total Non-metallic (excluding Fuel) Minerals</i>	<i>6,267</i>	<i>7,102</i>	<i>7,405</i>	<i>8,146</i>	<i>9,054</i>
<b>CONSTRUCTION MATERIALS.(b)</b>					
<i>Total Construction Materials</i> . . . . .	<i>9,409</i>	<i>12,346</i>	<i>14,824</i>	<i>16,444</i>	<i>17,842</i>
<b>TOTAL.</b>					
<b>Total, All Minerals and Construction Materials</b> . . . . .	<b>134,542</b>	<b>149,403</b>	<b>164,871</b>	<b>176,320</b>	<b>167,424</b>

(a) Excludes Australian Capital Territory, details of which are included with construction materials.  
 (b) Incomplete.

7. Value of Output and Value of Production for Mining and Quarrying.—(i) *Individual Industries, 1957.* The following two tables show particulars of the value of output and value of production of individual mining and quarrying industries and for all mining and quarrying for the year 1957. The data were obtained from industrial censuses of the mining and quarrying industry which were made on a substantially uniform basis in all States and Territories.

MINING AND QUARRYING: VALUE OF OUTPUT(a), 1957.  
(£'000.)

Industry.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Metal Mining—</i>									
Gold Mining .. .. .	268	680	301	(b)	14,537	..	973	..	16,759
Silver-Lead-Zinc Mining ..	26,820	(c)	(c)	(b)	(c)	1,951	(c)	..	39,463
Copper-Gold Mining .. .. .	12	..	(c)	(b)	56	(c)	1,521	..	7,233
Tin Mining .. .. .	173	(c)	625	..	151	808	(c)	..	1,762
Mineral Sands Mining .. .. .	6,219	..	(c)	..	(c)	..	..	..	9,792
Other Metal Mining .. .. .	97	(c)	(c)	4,389	1,408	(c)	..	52	8,004
<i>Total, Metal Mining</i>	<i>33,589</i>	<i>704</i>	<i>16,650</i>	<i>4,389</i>	<i>16,836</i>	<i>8,294</i>	<i>2,551</i>	<i>..</i>	<i>83,013</i>
<i>Fuel Mining—</i>									
Black Coal Mining .. .. .	40,450	556	7,177	911	2,553	632	..	..	52,279
Brown Coal Mining .. .. .	..	5,228	..	..	..	..	..	..	5,228
<i>Total, Fuel Mining</i> .. .. .	<i>40,450</i>	<i>5,784</i>	<i>7,177</i>	<i>911</i>	<i>2,553</i>	<i>632</i>	<i>..</i>	<i>..</i>	<i>57,507</i>
<i>Non-metal (excluding Fuel) Mining—</i>									
Clays(d) .. .. .	847	549	103	329	(e)	(c)	..	(e)	2,090
Gypsum .. .. .	194	54	..	341	26	..	..	..	615
Limestone .. .. .	990	625	(c)	887	(e)	234	..	..	3,301
Salt(d) .. .. .	..	(f)	(c)	679	(e)	..	(c)	..	735
Other Non-metal (excluding Fuel) Mining .. .. .	601	3	22	457	(c)	(c)	(c)	..	2,328
<i>Total, Non-metal (excluding Fuel) Mining</i>	<i>2,632</i>	<i>1,231</i>	<i>582</i>	<i>2,693</i>	<i>1,565</i>	<i>291</i>	<i>75</i>	<i>(e)</i>	<i>9,069</i>
<i>Total, All Mining</i> .. .. .	<i>76,671</i>	<i>7,719</i>	<i>24,409</i>	<i>7,993</i>	<i>20,954</i>	<i>9,217</i>	<i>2,626</i>	<i>(e)</i>	<i>149,589</i>
<i>Construction Material Quarrying(d)</i> .. .. .	<i>6,499</i>	<i>4,953</i>	<i>1,168</i>	<i>3,879</i>	<i>758</i>	<i>339</i>	<i>69</i>	<i>170</i>	<i>17,835</i>
<i>Total, All Mining and Quarrying</i> .. .. .	<i>83,170</i>	<i>12,672</i>	<i>25,577</i>	<i>11,872</i>	<i>21,712</i>	<i>9,556</i>	<i>2,695</i>	<i>170</i>	<i>167,424</i>

(a) Selling value at point of sale of mine or quarry products, less transport costs from mine or quarry to point of sale, i.e., value of output at mine or quarry. (b) Not available for publication; included with "Other Metal Mining". (c) Not available for publication. (d) Incomplete. (e) Not available for publication; included with "Construction Material Quarrying". (f) Not available.

MINING AND QUARRYING: VALUE OF PRODUCTION(a), 1957.  
(£'000.)

Industry.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Metal Mining—</i>									
Gold Mining .. .. .	108	473	236	(b)	9,837	..	783	..	11,437
Silver-Lead-Zinc Mining ..	19,805	(c)	(c)	(b)	(c)	1,630	(c)	..	29,044
Copper-Gold Mining .. .. .	(d) - 12	..	(c)	(b)	..	..	1,304	..	4,694
Tin Mining .. .. .	133	(c)	453	..	95	649	(c)	..	1,334
Mineral Sands Mining .. .. .	5,064	..	(c)	..	(e)	..	..	..	7,815
Other Metal Mining .. .. .	81	(c)	(c)	(c)	1,166	(c)	..	40	6,603
<i>Total, Metal Mining</i>	<i>25,179</i>	<i>497</i>	<i>(c)</i>	<i>(c)</i>	<i>11,635</i>	<i>6,013</i>	<i>2,131</i>	<i>..</i>	<i>60,927</i>
<i>Fuel Mining—</i>									
Black Coal Mining .. .. .	32,445	401	5,896	762	2,021	521	..	..	42,046
Brown Coal Mining .. .. .	..	4,593	..	..	..	..	..	..	4,593
<i>Total, Fuel Mining</i> .. .. .	<i>32,445</i>	<i>4,994</i>	<i>5,896</i>	<i>762</i>	<i>2,021</i>	<i>521</i>	<i>..</i>	<i>..</i>	<i>46,639</i>
<i>Non-metal (excluding Fuel) Mining—</i>									
Clays(e) .. .. .	703	511	89	(c)	(c)	(c)	..	(f)	1,866
Gypsum .. .. .	154	39	..	233	19	..	..	..	445
Limestone .. .. .	621	323	(c)	719	(c)	174	..	..	2,173
Salt(e) .. .. .	..	(g)	(c)	538	(c)	..	(c)	..	586
Other Non-metal (excluding Fuel) Mining .. .. .	490	3	21	407	(c)	(c)	(c)	..	1,844
<i>Total, Non-metal (excluding Fuel) Mining</i>	<i>1,968</i>	<i>876</i>	<i>(c)</i>	<i>(c)</i>	<i>1,203</i>	<i>225</i>	<i>73</i>	<i>(f)</i>	<i>6,914</i>
<i>Total, All Mining</i> .. .. .	<i>59,592</i>	<i>6,367</i>	<i>17,984</i>	<i>6,713</i>	<i>14,859</i>	<i>6,759</i>	<i>2,204</i>	<i>(f)</i>	<i>114,480</i>
<i>Construction Material Quarrying(e)</i> .. .. .	<i>6,499</i>	<i>3,521</i>	<i>827</i>	<i>2,606</i>	<i>516</i>	<i>273</i>	<i>36</i>	<i>110</i>	<i>14,388</i>
<i>Total, All Mining and Quarrying</i> .. .. .	<i>66,091</i>	<i>9,888</i>	<i>18,811</i>	<i>9,321</i>	<i>15,375</i>	<i>7,032</i>	<i>2,240</i>	<i>110</i>	<i>128,868</i>

(a) Value of output at mine, less cost of power, fuel, light and other materials and stores used; depreciation and maintenance costs have not been deducted. (b) Not available for publication; included with "Other Metal Mining". (c) Not available for publication. (d) Cost of materials used, etc., exceeds value of output. (e) Incomplete. (f) Not available for publication; included with "Construction Material Quarrying". (g) Not available.

(ii) *States, 1953 to 1957.* The following table shows the value of output and the value of production ascertained from the Australia-wide mineral industry censuses for the years 1953 to 1957.

**MINING AND QUARRYING : VALUE OF OUTPUT AND VALUE OF PRODUCTION.**  
(£'000.)

Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
VALUE OF OUTPUT.(a)									
1953 .. ..	72,346	9,329	17,284	6,203	20,011	8,037	1,221	111	134,542
1954 .. ..	78,202	10,080	21,603	8,580	20,736	8,955	1,145	103	149,404
1955 .. ..	84,244	10,917	26,892	10,512	19,746	10,744	1,691	125	164,871
1956 .. ..	88,790	11,891	30,204	11,910	20,230	10,355	2,594	146	176,320
1957 .. ..	83,170	12,672	25,577	11,872	21,712	9,556	2,695	170	167,424
VALUE OF PRODUCTION.(b)									
1953 .. ..	58,042	7,277	12,906	5,051	13,998	6,392	1,117	92	104,875
1954 .. ..	63,965	8,146	15,935	7,101	14,776	7,057	1,028	80	118,088
1955 .. ..	69,262	8,867	21,732	8,452	14,143	8,612	1,377	63	132,508
1956 .. ..	72,049	9,457	24,148	9,487	14,350	8,299	2,084	105	139,979
1957 .. ..	66,091	9,888	18,811	9,321	15,375	7,032	2,240	110	128,868

(a) Selling value of mine and quarry products at the mine or quarry. (b) Value of output less cost of power, fuel, light and other materials and stores used; depreciation and maintenance costs have not been deducted.

8. **Industrial Census of the Mining and Quarrying Industry, 1957.**—Since 1952, industrial censuses of the mining and quarrying industry have been taken annually in all States and Territories on a substantially uniform basis, thus providing important Australian statistics on mining and quarrying operations which were not previously available. A summary of the statistics collected in 1957 is shown in the following table.

**MINING AND QUARRYING: SUMMARY OF OPERATIONS, AUSTRALIA, 1957.**

Particulars.	Unit.	Metal Mining.	Fuel Mining. (a)	Non-metal (excluding Fuel) Mining. (b)	Total, All Mining.	Con- struction Material Quarrying.(c)	Total All Mining and Quarry- ing.
Mines and Quarries ..	No.	662	248	816	1,726	780	2,506
Persons Employed(d)	"	22,882	23,924	3,048	49,854	4,640	54,494
Salaries and Wages Paid(e)(f)	£'000	29,284	26,745	2,517	58,546	3,219	61,765
Value of Output(g)	"	83,013	57,507	9,069	149,589	17,835	167,424
Total Fuel, Materials, etc., Used .. ..	"	22,086	10,868	2,155	35,109	3,447	38,556
Value of Production(h)	"	60,927	46,639	6,914	114,480	14,388	128,868
Value of Additions and Re- placements to Fixed Assets(e)	"	10,734	11,935	1,788	24,457	874	25,331

(a) Oil Mining, where available, is included with Non-metal Mining. (b) Incomplete for some industries outside the normal administrative control of State Mines Departments (e.g., clays and salt). (c) Incomplete in some States. (d) Average number employed (including working proprietors) during whole year. (e) Excludes mines and quarries employing less than four persons. (f) Excludes drawings by working proprietors; the amounts are net after deducting value of explosives sold to employees. (g) Value at mine or quarry. (h) Value of output less cost of power, fuel, light and other materials and stores used; depreciation and maintenance costs have not been deducted.

In the next table, statistics of numbers of mines and quarries, persons employed, value of output and value of production are shown for each State, the Northern Territory and the Australian Capital Territory for the year 1957

## MINING AND QUARRYING: SUMMARY OF OPERATIONS, 1957.

State or Territory.	Mines and Quarries.	Persons Employed. (a)	Salaries and Wages Paid. (b)(c)	Value of Output. (d)	Total Fuel, Materials, etc., Used.	Value of Production. (e)	Value of Additions and Replacements to Fixed Assets.
			£'000.	£'000.	£'000.	£'000.	£'000.
New South Wales ..	846	27,299	31,958	83,170	17,079	66,091	10,912
Victoria ..	226	4,519	4,710	12,672	2,784	9,888	3,239
Queensland ..	471	9,109	10,421	25,577	6,766	18,811	5,619
South Australia ..	559	2,183	1,924	11,872	2,551	9,321	1,665
Western Australia ..	207	7,815	8,429	21,712	6,337	15,375	2,454
Tasmania ..	96	2,898	3,432	9,556	2,524	7,032	781
Northern Territory ..	97	628	834	2,695	455	2,240	622
Aust. Cap. Territory ..	4	43	57	170	60	110	39
<b>Australia ..</b>	<b>2,506</b>	<b>54,494</b>	<b>61,765</b>	<b>167,424</b>	<b>38,556</b>	<b>128,868</b>	<b>25,331</b>

(a) Average number employed (including working proprietors) during whole year. (b) Excludes mines and quarries employing less than four persons. (c) Excludes drawings by working proprietors; the amounts are net after deducting value of explosives sold to employees. (d) Value at mine or quarry. (e) Value of output less cost of power, fuel and light and other materials and stores used; depreciation and maintenance costs have not been deducted.

## § 2. Gold.

1. **Discovery in Various States.**—A detailed account of the discovery of gold in the various States appears under this section in Official Year Books Nos. 1 to 4.

2. **Mine Production.**—The following table shows the recorded mine production of gold (i.e., gold content of minerals produced) in the several States and in Australia as a whole during each of the ten decennial periods from 1851 to 1950, and in single years from 1951 to 1957. Owing to defective information in the earlier years it is likely that the recorded production falls considerably short of the actual totals.

GOLD : MINE PRODUCTION.(a)  
(<sup>'000 fine oz.</sup>)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Aust.
1851-60 ..	2,714	21,973	3	..	..	186	..	24,876
1861-70 ..	3,220	15,327	489	..	..	3	..	19,039
1871-80 ..	2,019	9,564	2,527	136	..	165	19	14,430
1881-90 ..	1,014	6,689	3,259	58	42	357	168	11,587
1891-1900 ..	2,432	7,040	5,648	52	5,252	550	214	21,188
1901-10 ..	2,253	7,095	5,512	73	17,784	604	111	33,432
1911-20 ..	1,145	3,067	2,263	55	10,671	202	23	17,426
1921-30 ..	204	593	434	10	4,557	43	2	5,843
1931-40 ..	569	1,052	1,021	53	8,474	130	84	11,383
1941-50 ..	572	800	750	13	6,683	157	148	9,123
1951 ..	49	66	79	(b)	648	15	39	896
1952 ..	39	68	85	(b)	727	16	45	980
1953 ..	26	64	92	(b)	823	17	53	1,075
1954 ..	32	53	98	(b)	862	19	54	1,118
1955 ..	30	38	64	(b)	835	17	65	1,049
1956 ..	29	39	56	(b)	814	17	75	1,030
1957 ..	31	46	63	(b)	850	20	74	1,084
<b>Total, 1851-1957</b>	<b>16,378</b>	<b>73,574</b>	<b>22,443</b>	<b>450</b>	<b>59,022</b>	<b>2,518</b>	<b>1,174</b>	<b>175,559</b>

(a) Gold content of minerals produced.

(b) Less than 500 fine oz.

The amount of gold won in Australia in any one year attained its maximum in 1903, when Western Australia also reached its highest point. For the other States, the years in which the greatest yields were obtained were as follows:—New South Wales, 1852; Victoria, 1856; Queensland, 1900; South Australia, 1904; and Tasmania, 1899. In recent years, output has expanded to record levels in the Northern Territory which is now the second largest producer in Australia.

Owing to the exhaustion of the more easily worked deposits and increased costs due to deep mining, the production of gold in Australia declined from 3,837,979 fine oz. in 1903 to 427,160 fine oz. in 1929, the lowest output since its discovery.

Increased activity in prospecting due to prevailing economic conditions resulted in some improvement in 1930, but the marked development between that year and 1939 was caused by the heavy depreciation of Australian currency in terms of gold. Following the outbreak of the 1939–45 War, there was a sharp fall in gold production to 656,867 fine oz. in 1944 and 657,213 fine oz. in 1945, but with the release of man-power after the war, there has been a slight upward trend in mine production of gold, which in 1953 exceeded 1,000,000 fine oz. for the first time since 1942. The devaluation of Australian currency in September, 1949 gave an impetus to gold production, but this was offset in the following years by increasing costs which brought about the closing of several large producers in New South Wales, Victoria and Western Australia.

To assist the industry in meeting the increase in costs, the Commonwealth Government decided in November, 1951, to permit Australian newly-won gold to be sold at a premium on overseas markets. Towards the end of 1953, however, the price of gold on overseas premium markets fell sharply and subsequent sales have been made at prices very little above the official price. This had an adverse effect on the financial position of the gold-mining industry and as a result the Commonwealth Government passed the Gold-Mining Industry Assistance Act in 1954 to prevent any serious decline in gold-mining activity. The operation of this Act has since been extended from two years to five years. In October, 1957, a further amendment to the Act increased the maximum subsidy payable, and also increased the maximum expenditure allowed for mine development in determining costs of production. The production of gold in Australia increased from 1951 to 1954 and fell back in 1955 and 1956 but recovered to a higher level in 1957 than in the previous two years.

3. Sources of Production.—(i) *New South Wales.* Gold production in 1957 was 31,043 fine oz. The only gold producer of any significance was Wellington Alluvials Ltd., who operated a dredge on the Macquarie River. However, as the grade of reserves was too low for profitable working, dredging operations there ceased in May, 1958. Other small quantities were won in conjunction with silver, lead and zinc at Broken Hill and at Captain's Flat, and by small prospecting parties throughout the State.

(ii) *Victoria.* In 1957, the gold yield in Victoria was 45,752 fine oz., nearly 7,000 fine oz. more than in 1956. The Wattle Gully mine at Chewton in central Victoria continued to be the major producer and accounted for almost half the State's total production.

(iii) *Queensland.* The output of 63,363 fine oz. during 1957 was higher than the previous year. More than two-thirds of the output came from Mt. Morgan. The only other major producer is Golden Plateau N.L. at Cracow.

(iv) *South Australia.* Only 35 fine oz. of gold were won in 1957 by prospectors in central and northern parts of the State.

(v) *Western Australia.* Production of gold during 1957 was 849,751 fine oz. This was 36,000 fine oz. more than production in 1956. More than half the year's total production of gold in Western Australia came from the Coolgardie goldfields, most of the remaining production coming from the Murchison, Dundas, Yilgarn and Mt. Margaret goldfields. The Lake View and Star Mine at Fimiston maintained its position as the largest gold producer in Australia, winning 169,745 fine oz. during 1957, and two other mines each produced over 100,000 fine oz. in the same period.

(vi) *Tasmania.* Production of gold in Tasmania during 1957 was 20,027 fine oz. Almost all of this production was won as a by-product of lead-zinc mining at Rosebery and of copper mining at Mt. Lyell in western Tasmania but a small amount was also won in tin dredging operations in the north-eastern area of the State.

(vii) *Northern Territory.* Gold production in Northern Territory which has been steadily increasing in recent years, reached a record level of 75,421 fine oz. in 1956 but declined to 73,970 fine oz. in 1957. Production is centered around Tennant Creek, the main producer being the "Nobles Nob" mine. Another large producer is the Peko mine where gold is recovered from copper concentrates.

4. *Refinery Production.*—Details of the refinery production of gold in Australia and the value of refined newly-won gold of Australian origin are shown in the following table for each of the years 1953 to 1957. The value of the refined newly-won gold is based on the price fixed by the Commonwealth Bank, but allowance is made for premiums on sales of gold overseas and for industrial purposes in Australia.

PRODUCTION OF REFINED GOLD IN AUSTRALIA.

Particulars.	1953.	1954.	1955.	1956.	1957.
QUANTITY (FINE OUNCES).					
Australian Origin—					
Newly-won Gold .. .. .	1,052,779	1,063,457	1,054,714	1,044,164	1,078,419
From Scrap .. .. .	21,494	20,728	20,130	20,106	21,480
Oversea Origin—					
Newly-won Gold .. .. .	202,405	189,913	167,547	161,065	171,970
From Scrap .. .. .	324	828	454	708	1,248
<b>Total .. .. .</b>	<b>1,277,002</b>	<b>1,274,926</b>	<b>1,242,845</b>	<b>1,226,043</b>	<b>1,273,117</b>
VALUE (£.).					
Newly-won Gold of Australian Origin .. .. .	16,780,106	16,589,114	16,503,403	16,345,912	16,872,458

5. *Changes in Stocks of Gold held in Australia.*—The following table shows particulars of production, imports and exports of gold and changes in stocks of gold held in Australia for each of the years 1953–54 to 1957–58.

**CHANGES IN STOCKS OF GOLD HELD IN AUSTRALIA.**  
(Fine oz.)

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Mine Production of Gold(a)	1,111,420	1,080,249	1,032,436	1,062,128	1,083,534
Imports of Gold(b)(c) ..	189,628	175,166	175,649	143,852	169,119
<i>Total</i> .. ..	<i>1,301,048</i>	<i>1,255,415</i>	<i>1,208,085</i>	<i>1,205,980</i>	<i>1,252,653</i>
Exports of Gold(b) ..	863,464	864,391	531,664	908,283	405,307
Gold Content of Ores and Concentrates Exported ..	12,526	11,133	13,427	21,817	23,787
Net Industrial Absorption of Gold .. ..	51,543	45,253	34,678	39,815	40,786
<i>Total</i> .. ..	<i>927,533</i>	<i>920,777</i>	<i>579,769</i>	<i>969,915</i>	<i>469,880</i>
Changes in Stocks of Gold held in Australia(d) .. ..	+373,515	+334,638	+628,316	+236,065	+782,773

(a) Gold content of minerals produced in Australia. (b) Includes gold contained in matte.  
(c) Excludes gold imported in some minor minerals. (d) Includes gold content of mineral products awaiting refining; excludes gold specie.

6. **Production in Principal Countries.**—The quantities of gold produced in the principal producing countries and the estimated world total production in each of the years 1952 to 1957, according to data published by the Mineral Resources Division of the United Kingdom Overseas Geological Surveys, are shown in the table hereunder.

**GOLD : PRODUCTION IN PRINCIPAL COUNTRIES.**  
(\*000 fine oz.)

Country.	1953.	1954.	1955.	1956.	1957.
Union of South Africa ..	11,941	13,237	14,601	15,897	17,031
Canada .. ..	4,056	4,366	4,542	4,384	4,436
United States of America ..	1,958	1,837	1,880	1,832	1,794
Australia .. ..	<b>1,075</b>	<b>1,118</b>	<b>1,049</b>	<b>1,030</b>	<b>1,084</b>
Ghana .. ..	731	787	687	638	790
Rhodesia and Nyasaland ..	504	538	527	540	540
Philippines .. ..	481	416	419	406	380
Belgian Congo .. ..	371	365	370	374	374
Mexico .. ..	483	387	383	350	346
Colombia .. ..	437	377	381	438	325
<i>Estimated World Total(a)</i> ..	<i>24,200</i>	<i>25,700</i>	<i>26,900</i>	<i>28,000</i>	<i>29,000</i>

(a) Excludes U.S.S.R.

7. **Price of Gold.**—Under existing legislation, all gold produced in Australia is sold to the Commonwealth Bank. The official price of gold is fixed by the Commonwealth Bank, and on 1st May, 1954, it was raised from £15 9s. 10d. to £15 12s. 6d. per fine oz. The current price reflects the "parity" value of Australian currency established by the International Monetary Agreement Act 1947. Previously, the price of gold was based on the price for which gold could be sold abroad in official markets, less costs of movement.

From December, 1951, gold has been sold on overseas premium markets, and the highest price realized was £17 4s. 2d. per fine oz. in February, 1952. Since October, 1953, however, the premium on gold sold overseas only exceeded one shilling per fine oz. for a short period in 1956.

Average prices of gold per fine oz. in Australia, on overseas premium markets, and in London, for the years 1953 to 1957, are shown in the following table. The London gold market was re-opened on 22nd March, 1954, and the prices quoted on this market are used from that date. Previously the Bank of England official price was used.

## PRICE OF GOLD.

Year.	At Mints in Australia.	Australian Gold Sold on Oversea Premium Markets.	London.
	£A. s. d.	£A. s. d.	£stg. s. d.
1953.. .. .	15 9 10	16 2 9	12 8 0
1954.. .. .	15 11 7	15 11 7	12 9 4
1955.. .. .	15 12 6	15 13 1	12 10 11
1956.. .. .	15 12 6	15 13 6	12 10 2
1957.. .. .	15 12 6	15 13 2	12 10 3

8. **Employment in Gold Mining.**—Particulars of the numbers of persons employed in gold mining are shown in § 13, page 1049.

9. **Assistance to Gold-mining Industry.**—In 1939, a tax was imposed on gold produced in Australia or any Australian Territory but this tax was suspended in 1947. In November, 1951, the Commonwealth Government decided to allow Australian gold producers to benefit from the high prices being paid for gold on some overseas markets. To implement this decision, the Gold Producers' Association was incorporated in Victoria, but with its headquarters in Kalgoorlie, Western Australia, in December, 1951, and the first sales were made in that month. Under existing legislation, all gold produced in Australia must be sold to the Commonwealth Bank but the newly-formed Association was permitted to purchase from the Bank each month for resale on premium markets a maximum quantity of gold equal to the amount of new gold delivered to the Bank by members in the previous month, less the quantity required for industrial purposes in Australia. The net proceeds from premium sales are distributed to members in proportion to their production of gold. The actual volume of sales has been dependent largely on prices offering and, up to the end of 1953, premium sales of gold brought an additional return to the industry amounting to over £1,800,000. Towards the end of 1953, however, the price of gold on overseas premium markets fell sharply and subsequent sales have been made at prices very little above the official price.

The following table shows the quantity and value of gold sold on overseas premium markets during the years 1953 to 1957. For the average price realized for their sales, see para. 7 above.

## GOLD SOLD ON OVERSEA PREMIUM MARKETS.

Item.	Unit.	1953.	1954.	1955.	1956.	1957.
Quantity ..	fine oz. . .	1,108,506	602,767	981,980	505,262	687,115
Value ..	£A. f.o.b.	16,435,910	9,390,028	15,370,834	7,919,646	10,760,214

After the collapse of high premium prices late in 1953, conditions in the gold-mining industry again became acute and many producers were faced with the prospect of closing down. To meet this situation, the Gold-Mining Industry Assistance Act was assented to on 18th November, 1954. The purpose of this Act was to assist the gold-mining industry by the payment of subsidy subject to certain conditions on the production and sales of gold during the two financial years 1954-55 and 1955-56. In 1956, the operation of the Act was extended for a further three years to 1958-59. A further amendment enacted on 22nd October, 1957, raised the maximum subsidy payable and increased expenditure allowances for mine development. Under this amendment, which operated from 1st July, 1957, the subsidy payable to small producers whose annual output does not exceed 500 fine oz. was raised from £1 10s. 0d. per fine oz. to £2 per fine oz., irrespective of cost of

production. For large producers, the formula for determining the amount of subsidy payable remained unchanged, namely: Three-quarters of the excess of average cost of production per fine oz. over £13 10s. 0d.

Subsequently, the maximum rate of subsidy payable was increased from £2 per fine oz. to £2 15s. 0d. per fine oz. Where a producer receives an amount in excess of the official price of £15 12s. 6d. per fine oz. as a result of sales on oversea premium markets or otherwise, the subsidy payable shall be reduced by the amount of the excess. The subsidy will also be limited to the extent that the annual net profit of a producer will not, with the addition of the subsidy, exceed 10 per cent. of the capital investment in the company. A further condition of the Act is that the recovery rate of the mine shall be maintained at the level of the year previous to the Act.

Payments under the Act commenced in March, 1955, and the amounts paid to gold producers in the various States and Territories of Australia in each of the years 1955 to 1958 are shown in the following table.

#### NET SUBSIDY PAYMENTS TO GOLD PRODUCERS.

(£.)

Year.	New South Wales.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Papua and New Guinea.	Total.
1955 .. ..	225	29,657	966	..	199,051	..	441	6,606	236,946
1956 .. ..	17	31,478	2,848	..	496,819	..	1,020	63,979	596,161
1957 .. ..	34	56,044	620	..	512,708	..	8,345	10,761	588,512
1958 .. ..	26,951	38,380	3,958	..	623,394	..	16,360	44,485	753,528

### § 3. Silver, Lead and Zinc.

1. Mine Production.—The following table shows for 1957 the mine production (metallic content of ores and concentrates produced) of silver, lead and zinc in Australia, and the respective minerals in which these metals were contained.

#### SILVER, LEAD AND ZINC : CONTENT OF ORES AND CONCENTRATES PRODUCED, AUSTRALIA, 1957.

Mineral in which contained.	Silver (fine oz.).	Lead (tons).	Zinc (tons).
Copper Ore and Concentrate .. ..	1,009,686	2,719	..
Gold Concentrate, etc. .. ..	193,675	..	..
Lead-Silver Ore .. ..	384,779	2,656	..
Lead Concentrate .. ..	13,475,649	320,319	..
Zinc Concentrate .. ..	675,650	7,570	291,582
<b>Total</b> .. ..	<b>15,739,439</b>	<b>333,264</b>	<b>291,582</b>

The following table shows the mine production of silver, lead and zinc in Australia, for the years 1953 to 1957.

#### SILVER, LEAD AND ZINC : CONTENT OF ORES AND CONCENTRATES PRODUCED, AUSTRALIA.

Metal.	Unit.	1953.	1954.	1955.	1956.	1957.
Silver .. ..	'000 fine oz.	12,539	13,827	14,555	14,586	15,739
Lead .. ..	ton	269,344	284,862	295,944	299,485	333,264
Zinc .. ..	..	239,324	252,659	256,564	278,082	291,582

The following table shows the quantities of silver, lead and zinc contained in minerals won in the several States of Australia in the year 1957:—

**SILVER, LEAD AND ZINC : CONTENT OF ORES AND CONCENTRATES PRODUCED, 1957.**

State.	Silver (fine oz.)	Lead (tons).	Zinc (tons).
New South Wales .. .. .	9,969,102	266,928	241,509
Victoria .. .. .	3,157	4	..
Queensland .. .. .	4,274,271	50,780	19,536
South Australia .. .. .	975	20	97
Western Australia .. .. .	187,530	3,087	..
Tasmania .. .. .	1,299,062	12,445	30,440
Northern Territory .. .. .	5,342	..	..
<b>Australia .. .. .</b>	<b>15,739,439</b>	<b>333,264</b>	<b>291,582</b>

Particulars of the values ascribed to the minerals containing silver, lead and zinc for the years 1953 to 1957 are shown in the table relating to mineral production on page 1014.

2. Sources of Production.—(i) *New South Wales.* By far the most silver-lead-zinc ore in Australia is won from the massive silver-lead-zinc sulphide deposit at Broken Hill. The companies concerned in operating this gigantic lode are North Broken Hill Ltd., which mines the northern limb of the ore-bearing structure, and Broken Hill South Ltd. and Zinc Corporation Ltd. (with which is associated New Broken Hill Consolidated), which are conducting operations on the southern limb.

The present-day sulphide ores are concentrated by gravity and flotation methods at Broken Hill. The lead concentrates are railed to Port Pirie and smelted to produce lead bullion which is later refined by a continuous lead refining process for the elimination of arsenic and antimony and the recovery of silver and gold. Cadmium metal also is produced from smelter fumes. Lead concentrates produced at Broken Hill are now in excess of Port Pirie smelter capacity and part of the Broken Hill production is exported. About half of the zinc concentrate produced at Broken Hill is exported overseas from Port Pirie while most of the remainder is treated at Risdon in Tasmania.

At Captain's Flat, Lake George Mines Ltd. is operating a lode of similar constitution. Concentration of the ore is carried out at the mine itself, after which process individual concentrates of zinc and lead (containing silver) are dispatched to Port Kembla, New South Wales, for further treatment. Concentrates of copper, pyrite and gold are also produced at this mine.

Silver-lead-zinc ore has been mined in small quantities in various other parts of the State, the more important localities being Howell, Yerranderie and Kangiara.

(ii) *Victoria.* Small quantities of lead sulphide ore occur on most of Victoria's gold-fields and in minor amounts in the Ormeo, Bethanga and Cassilis districts. The lead content of silver-lead ore produced in 1957 was 4 tons.

Of the total production of 3,157 fine oz. of silver in 1957, 3,082 fine oz. were won as a by-product of the gold mining industry.

(iii) *Queensland.* Silver produced in Queensland is obtained mainly as a by-product of ores of other metals such as lead-zinc and copper ores at Mt. Isa and copper-gold ore at Mt. Morgan.

Nearly all the output of lead in Queensland is produced at Mt. Isa in the far north-west of the State, where mining is carried out on extensive silver-lead-zinc ore and copper ore bodies. Lead concentrate produced at Mt. Isa is smelted to lead bullion at the mine. All Mt. Isa lead bullion is exported overseas, where certain impurities, such as antimony, arsenic and copper, as well as silver, are removed to yield a pure lead suitable for commercial use.

Zinc concentrates produced by Mt. Isa are also exported overseas. Copper ore is mined and smelted on a large scale at Mt. Isa and details of those operations are given in § 4.

(iv) *South Australia.* Output of lead from local ores has been very small in recent years. During 1957, 20 tons of lead and 975 fine oz. of silver were produced in lead-silver ore and 97 tons of zinc were produced in zinc concentrates.

(v) *Western Australia.* During 1957, 582 tons of lead were produced in lead-silver ore and 2,505 tons produced in lead concentrates.

Silver in Western Australia is obtained as a by-product of the gold-mining industry, which produced 178,619 fine oz. of silver out of the State's total production of 187,053 fine oz. in 1957. There was no production of zinc in Western Australia during 1957.

(vi) *Tasmania.* There are two large centres of silver-lead-zinc mining in Tasmania, the more important being that operated by the Electrolytic Zinc Company of Australasia Ltd. at Read-Rosebery. This company also operates the electrolytic zinc reduction works at Risdon near Hobart. Although the product of this field is primarily zinc, lead and copper-lead concentrates are also produced.

The lead concentrates and copper-lead concentrates produced at Rosebery are exported overseas, while the zinc concentrates, containing some lead, are treated at Risdon. The Risdon plant also treats considerable quantities of zinc concentrates from the Broken Hill mines.

Of secondary importance to Rosebery is the Mount Farrell field, situated 6 miles north-east of Rosebery. These ore-bodies are mainly silver-lead lodes which yield a lead concentrate with high silver content. The zinc content is insufficient to warrant recovery.

Most of the State's silver is contained in concentrates produced at Rosebery, the remainder being contained in copper concentrate produced at Mt. Lyell and in lead concentrate produced at several small mines in the west coast district.

(vii) *Northern Territory.* There was no production of minerals containing lead or zinc in the Northern Territory in 1957. Silver is obtained mainly as a by-product of the copper-gold mining industry which produced 4,268 fine oz. of the Territory's total production of 5,342 fine oz.

3. **Production and Sales of Refined Silver, Lead and Zinc.**—In the following table, details are given of the production and sales of refined primary silver, lead and zinc as recorded from data received from the Bureau of Mineral Resources and the Australian Mines and Metals Association. The figures shown for refined silver production include small quantities recovered from imported materials.

#### REFINED SILVER, LEAD AND ZINC : PRODUCTION AND SALES, AUSTRALIA.

Particulars.	1953.	1954.	1955.	1956.	1957.
<b>SILVER ('000 fine oz.).</b>					
Production (a) .. .. .	6,595	8,474	7,818	8,232	8,011
Sold to Australian consumers (b) .. .. .	1,447	1,977	1,928	1,893	4,410
Sold for export (b) .. .. .	4,755	6,989	5,793	6,214	3,397
<b>LEAD (tons).</b>					
Refined Lead—					
Production (a) .. .. .	172,468	200,409	187,134	194,506	192,161
Sold to Australian consumers (b) .. .. .	31,663	42,088	45,851	38,616	37,291
Sold for export (b) .. .. .	141,007	153,847	148,189	151,628	152,432
Lead Bullion—					
Produced for export (lead content) (a) .. .. .	34,050	38,146	37,392	41,658	46,891
<b>ZINC (tons).</b>					
Production (a) .. .. .	90,178	104,523	101,090	104,993	110,348
Sold to Australian consumers (b) .. .. .	58,524	61,478	71,355	69,760	78,874
Sold for export (b) .. .. .	32,881	36,130	34,049	32,718	37,316
(a) Source: Bureau of Mineral Resources.	(b) Source: Australian Mines and Metals Association.				

4. **Production in Principal Countries and World Total:**—The following table shows, for the years 1955 to 1957, particulars of silver, lead and zinc production (mine basis) in principal producing countries, together with the estimated world total, according to data published by the Mineral Resources Division of the United Kingdom Overseas Geological Surveys.

## SILVER, LEAD AND ZINC : MINE PRODUCTION IN PRINCIPAL COUNTRIES.

Country.	1955.	1956.	1957.
<b>SILVER (fine oz.).</b>			
Mexico .. .. .	47,957,655	43,078,040	47,149,514
United States of America .. .. .	37,197,742	38,948,121	38,164,915
Canada .. .. .	27,984,204	28,431,847	30,138,447
Peru .. .. .	22,947,625	22,972,766	25,310,479
U.S.S.R. .. .. .	(a) 25,000,000	(a) 25,000,000	(a) 25,000,000
Australia .. .. .	14,555,412	14,586,197	15,739,439
Japan .. .. .	5,948,627	6,166,963	6,526,183
Bolivia .. .. .	5,851,242	7,543,304	5,375,058
Belgian Congo .. .. .	4,083,000	3,794,000	3,045,000
<i>Estimated World Total</i> .. .. .	<i>224,000,000</i>	<i>225,000,000</i>	<i>230,000,000</i>
<b>LEAD (long tons).</b>			
Australia .. .. .	295,944	299,485	333,264
U.S.S.R. .. .. .	(a) 290,000	(a) 305,000	(a) 320,000
United States of America .. .. .	301,808	315,023	301,979
Mexico .. .. .	207,486	196,457	211,482
Canada .. .. .	181,037	168,620	167,777
Peru .. .. .	116,875	127,035	129,200
<i>Estimated World Total</i> .. .. .	<i>2,140,000</i>	<i>2,225,000</i>	<i>2,320,000</i>
<b>ZINC (long tons).</b>			
United States of America .. .. .	459,528	484,232	474,763
Canada .. .. .	386,926	377,350	368,133
U.S.S.R. .. .. .	(a) 255,000	(a) 270,000	(a) 300,000
Australia .. .. .	256,564	278,082	291,582
Mexico .. .. .	265,144	244,956	239,189
Poland .. .. .	153,700	150,900	156,300
Peru .. .. .	163,459	172,354	154,974
<i>Estimated World Total</i> .. .. .	<i>2,820,000</i>	<i>2,950,000</i>	<i>3,010,000</i>

(a) Estimated.

5. Prices of Silver, Lead and Zinc.—The following table shows average prices in Australia and on the London Metal Exchange during the years 1953 to 1957. Lead and zinc prices were controlled in Australia and the United Kingdom after the outbreak of war in 1939, but were decontrolled in Australia on 21st April, 1953. Free trading in lead in the United Kingdom, after thirteen years of Government control, was resumed on 1st October, 1952, while the fixing by regulation of the price of zinc was abandoned from 1st January, 1953. Silver prices have not been controlled in Australia or the United Kingdom.

## PRICES OF SILVER, LEAD AND ZINC.

Metal.	1953.	1954.	1955.	1956.	1957.
<i>Australian Prices, in Australian currency—</i>					
	<i>s. d.</i>				
Silver, per fine oz. (a) .. .. .	7 8	7 8	8 1	8 3	8 3
	£	£	£	£	£
Lead, per ton .. .. .	(b) 104	114	127	140	117
Zinc, per ton .. .. .	(b) 92	101	114	122	104
<i>London Metal Exchange Prices, in sterling—</i>					
	<i>s. d.</i>				
Silver, per fine oz. .. .. .	6 2	6 2	6 4	6 7	6 7
	£	£	£	£	£
Lead, per ton .. .. .	91	96	106	116	97
Zinc, per ton .. .. .	75	78	91	98	82

(a) Silver prices shown represent export parity calculated from London Metal Exchange prices.

(b) Prices fixed by regulation to 21st April, 1953; average market prices have been used thereafter.

6. Employment in Silver, Lead and Zinc Mining.—Particulars of the number of persons employed in mining for these metals are shown in § 13, page 1049.

## § 4. Copper.

1. **Mine Production.**—Copper is widely distributed throughout Australia. However, the principal producing States in 1957 were Queensland, Tasmania, Northern Territory and New South Wales, in that order of magnitude. The table hereunder shows the quantity of mine production of copper (copper content of ores and concentrates produced) in Australia for the years 1953 to 1957, including cupreous ore mined for fertilizer production. It should be noted that the minerals shown below contain, in addition to copper, certain other metals.

**COPPER : CONTENT OF ORES AND CONCENTRATES PRODUCED, AUSTRALIA**  
(Tons.)

Mineral in which Contained.	1953.	1954.	1955.	1956.	1957.
Copper Ore, Concentrate and Precipitate	33,184	37,425	42,370	49,556	52,672
Gold Ore, Concentrate, etc. . . . .	1	(a)	..	(a)	(a)
Lead Ore and Concentrate . . . . .	3,037	3,241	3,224	3,462	3,770
Zinc Concentrate . . . . .	540	575	598	719	726
Tin Concentrate . . . . .	..	..	..	..	7
<b>Total</b> . . . . .	<b>36,762</b>	<b>41,241</b>	<b>46,192</b>	<b>53,737</b>	<b>57,175</b>

(a) Less than half a ton.

Particulars of the copper content of ores and concentrates produced in each producing State and the Northern Territory for the years 1953 to 1957, are shown in the table below.

**COPPER : CONTENT OF ORES AND CONCENTRATES PRODUCED, STATES.**  
(Tons.)

State.	1953.	1954.	1955.	1956.	1957.
New South Wales .. ..	3,626	3,182	3,492	4,289	4,382
Queensland .. ..	23,955	27,207	30,738	34,898	33,706
South Australia .. ..	1	(a)	..	1	2
Western Australia .. ..	190	380	699	740	788
Tasmania .. ..	8,902	9,880	8,394	8,807	10,984
Northern Territory .. ..	88	592	2,869	5,002	7,313
<b>Australia</b> .. ..	<b>36,762</b>	<b>41,241</b>	<b>46,192</b>	<b>53,737</b>	<b>57,175</b>

(a) Less than half a ton.

2. **Sources of Production.**—(i) *New South Wales.* The copper content of all ores and concentrates produced in New South Wales amounted to 4,382 tons in 1957. The only producer of copper concentrate in the State was the Lake George mine at Captain's Flat, but the major production of copper was as a by-product of lead and zinc mining at Broken Hill.

(ii) *Queensland.* In 1957, mine production of copper in minerals amounted to 33,706 tons. The main centre of production is the Cloncurry field in the north-western part of the State. Since the opening of the new copper smelter at Mt. Isa in February, 1953, copper production in Queensland has increased rapidly and the Mt. Isa mine now produces about half of the total Australian output. Lead bullion and zinc concentrate are also produced at Mt. Isa. The only other major copper producer is Mt. Morgan, just south of Rockhampton, where copper is produced in conjunction with gold.

(iii) *South Australia.* Deposits of copper were found in the past over a large portion of South Australia, but the principal fields have been exhausted and output in recent years has been negligible.

(iv) *Western Australia.* During 1957, 324 tons of copper were produced in copper concentrates, compared with 46 tons of copper in the previous year. This increase was caused by the commencement of production, during 1957, at the Ravensthorpe mine in the south-east of the State. In addition, 464 tons of copper were produced in copper ore used for superphosphate fertilizer production.

(v) *Tasmania.* The quantity of copper produced in Tasmania during 1957 was 10,984 tons, the Mount Lyell Mining and Railway Co. Ltd. providing the greater part thereof. The remainder consisted mainly of copper in copper-lead concentrates exported from Read-Rosebery.

(vi) *Northern Territory.* The greatest part of the output of 7,306 tons of copper in the Northern Territory during 1957, came from the Peko mine at Tennant Creek. Although originally worked as a gold mine, high-grade copper ore was discovered there, and since the new milling plant came into operation in June, 1954, the mine has become the major producer of copper in the Northern Territory. Copper concentrate is also produced at Rum Jungle by Territory Enterprises Pty. Ltd. In addition, 53 tons of copper ore containing 7 tons of copper were produced for fertilizer manufacture.

**3. Smelter and Refinery Production of Copper.**—The production of blister copper in Australia has more than doubled since the copper smelter at Mt. Isa commenced operations in 1953. Blister copper is also produced at Mt. Lyell in Tasmania, Mt. Morgan in Queensland and at Port Kembla in New South Wales. Copper concentrate smelted at Port Kembla is mainly from Lake George Mines Pty. Ltd. at Captain's Flat, N.S.W. and Peko Mines N.L. at Tennant Creek, N.T. The production of primary blister copper in Australia during 1957 was 50,879 tons compared with 49,030 tons in 1956 and 20,008 tons before the opening of the Mt. Isa smelter in 1952.

Mt. Isa Mines Ltd. has no facilities of its own for refining copper at the present time, but it has under construction an electrolytic refinery at Townsville, Queensland, with an initial annual capacity of 30,000 tons. Some of the copper is at present shipped for refining at Port Kembla, the balance being exported overseas. Blister copper produced at Mt. Morgan is shipped to Port Kembla for refining and the recovery of gold, which in 1957 averaged just over 7 fine oz. per ton of blister copper.

At Mt. Lyell, refined copper is produced by electrolytic process, and, apart from some sold in Tasmania, the cathode copper produced is shipped to Port Kembla for casting into refinery shapes.

The refining plant operated by the Electrolytic Refining and Smelting Co. at Port Kembla, is a custom smelter and refinery which treats copper ore, concentrates, and metal in all stages. It has an annual capacity of 32,000 tons of electrolytic copper. Fire-refining, which is a cheaper process, is done on a smaller scale when materials are amenable to that treatment. There is also a refinery for the recovery of precious metals from tank house slimes. In the following table, details are given of the production and sales of refined copper, as recorded from data received from the Australian Mines and Metals Association and the Bureau of Mineral Resources.

#### REFINED COPPER(a) : PRODUCTION AND SALES, AUSTRALIA.

(Tons.)

Particulars.	1953.	1954.	1955.	1956.	1957.
Production (b)	16,682	29,287	28,148	29,307	32,880
Sold to Australian consumers (c)	15,415	29,361	27,366	29,038	34,114
Sold for export (c)	2,607			650	

(a) Refined from domestic primary copper.  
(c) Source: Australian Mines and Metals Association.

(b) Source: Bureau of Mineral Resources.

**4. Production in Principal Countries and World Total.**—The following table shows the mine production of copper during 1955, 1956 and 1957 from the principal producing countries, as published by the Minerals Resources Division of the United Kingdom Overseas Geological Surveys and their estimate of total world production in those years.

**COPPER: MINE PRODUCTION IN PRINCIPAL COUNTRIES.**  
(Long Tons.)

Country.	1955.	1956.	1957.
United States of America .. ..	891,580	982,692	969,769
Chile .. ..	438,859	494,851	(a) 490,000
U.S.S.R. .. ..	(a) 400,000	(a) 425,000	(a) 465,000
Rhodesia .. ..	354,016	399,461	431,732
Canada .. ..	291,066	316,839	308,953
Belgian Congo .. ..	231,394	246,016	238,418
Japan .. ..	71,845	77,230	79,650
Mexico .. ..	53,812	53,998	59,600
Australia .. ..	46,192	53,737	57,175
Peru .. ..	42,718	45,506	47,583
Union of South Africa .. ..	43,669	45,762	45,499
<i>Estimated World Total</i> .. ..	<i>3,110,000</i>	<i>3,450,000</i>	<i>3,530,000</i>

(a) Estimated.

5. Prices.—From the outbreak of war in 1939 to August, 1953, in the United Kingdom and October, 1954, in Australia, the price of copper was fixed by regulation. Private trading has now been resumed in both countries. Details of the average price for the years shown are given in terms of Australian currency and sterling in the following table:—

**AVERAGE PRICE PER TON OF ELECTROLYTIC COPPER IN AUSTRALIA AND THE UNITED KINGDOM.**  
(£.)

Country.	1953.	1954.	1955.	1956.	1957.
Australia — in Australian currency(a) .. ..	330	(b) 310	437	435	341
United Kingdom—in sterling (c) 253	253	249	352	304	220

(a) Ex works Port Kembla. (b) Average market prices from 26th October, 1954. (c) Average market prices from 5th August, 1953.

6. Employment in Copper Mining.—Particulars of the numbers of persons engaged in the mining of copper and copper-gold ores are shown in § 13, page 1049.

7. Assistance to the Copper-mining Industry.—Following a Tariff Board enquiry which recommended that the industry should be assisted by stabilizing the price of copper at £330 per ton, the Government decided to provide this assistance partly by duty and partly by bounty. The bounty is payable on copper sold on the Australian market, with a maximum of £45 per ton, or such total bounty as will give a return of 10% on assessed capital employed in the production of copper if this is less than £45 per ton. The bounty reduced the net effective price of copper to Australian consumers from £330 to £285. A duty is imposed on imported copper when the Australian equivalent of the London Metal Exchange price falls below £275 (£Stg.220), increasing by £1 for each £1 that the Australian equivalent falls below £275. Including freight and other charges, the landed cost is thus expected to be maintained at about £285 so long as the Australian equivalent of the London Metal Exchange price is not in excess of £275.

### § 5. Tin.

1. Mine Production.—The following table shows the tin content of concentrates produced in each State and the Northern Territory for the years 1953 to 1957.

**TIN: CONTENT OF TIN CONCENTRATES PRODUCED: STATES.**  
(Tons.)

State.	1953.	1954.	1955.	1956.	1957.
New South Wales .. ..	342	272	270	269	211
Victoria .. ..	31	26	2	..	(a)
Queensland .. ..	292	730	770	630	772
Western Australia .. ..	76	80	119	240	182
Tasmania .. ..	788	947	853	938	777
Northern Territory .. ..	24	20	3	1	10
<i>Australia</i> .. ..	<i>1,553</i>	<i>2,075</i>	<i>2,017</i>	<i>2,078</i>	<i>1,952</i>

(a) Less than half the unit of quantity shown.

2. Sources of Production.—(i) *New South Wales.* Production of tin in tin concentrates in 1957 was 211 tons compared with 269 tons in 1956. A large proportion of the output in this State is obtained by dredging and sluicing, principally in the New England district.

(ii) *Victoria.* With the closing down of the Eldorado gold dredge in July, 1954, the production of tin in Victoria virtually ceased. Production during 1957 amounted to one third of a ton of concentrates.

(iii) *Queensland.* The tin content of concentrates produced in 1957 and 1956 was 772 tons and 630 tons respectively. Production of concentrates in 1957 amounted to 1,189 tons compared with 883 tons in 1956. The chief districts producing concentrate during 1957 were Herberton 1,058 tons, Kangaroo Hills 72 tons and Cooktown 30 tons. The largest producer is Tableland Tin N.L. It is interesting to compare these production figures with those recorded in this State in the early years of this century when the output ranged between 2,000 and 5,000 tons per annum.

(iv) *Western Australia.* The quantity of tin in tin concentrates reported in this State in 1957 amounted to 182 tons, compared with 240 tons in 1956. Production was mainly in the Pilbara and Greenbushes fields.

(v) *Tasmania.* For 1957, the output of tin in tin concentrates amounted to 777 tons. The tin content for 1956 was 938 tons.

(vi) *Northern Territory.* The production of tin in tin concentrates for 1957 amounted to 10 tons compared with one ton produced during 1956.

3. Production of Refined Tin.—There are two firms engaged in the smelting of tin in Australia, both located in Sydney, New South Wales. Production recorded by the Bureau of Mineral Resources amounted to 1,806 tons in 1957, compared with 1,850 tons in 1956.

4. Production in Principal Countries and World Total.—The production of tin reached its maximum in 1941 when 241,400 tons were recorded. The chief producing countries of the world are—Federation of Malaya, Bolivia, Indonesia, Belgian Congo, Thailand and China and in recent years these countries have produced approximately 90 per cent. of the total production. Australia's share of the world's tin production is about 1 per cent.

The production of tin ore (metal content) as published by the Mineral Resources Division of the United Kingdom Overseas Geological Surveys, for the principal producing countries in 1956 and 1957 was as follows.

### TIN : PRODUCTION IN PRINCIPAL COUNTRIES.

(Long Tons.)

Country.	Production.		Country.	Production.	
	1956.	1957.		1956.	1957.
Malaya .. ..	62,296	59,293	Australia .. ..	2,078	1,952
Bolivia .. ..	26,421	27,796	Union of South Africa	1,442	1,463
Indonesia .. ..	29,579	27,721	Portugal .. ..	1,276	1,127
Belgian Congo	14,764	14,859	United Kingdom ..	1,066	1,080
Thailand .. ..	12,481	13,528			
China .. ..	8,400	9,600	<i>Estimated World</i>		
Nigeria .. ..	9,067	9,534	<i>Total(a)</i> ..	174,600	174,000

(a) Excludes U.S.S.R.

5. Prices.—At the outbreak of war in September, 1939, the price of tin in Australia and in London was fixed by regulation. London control of tin prices ceased on 14th November, 1949, while the Australian price was decontrolled on the 21st April, 1953. Details of the movement in average prices for the years 1952 to 1956 are given in terms of Australian currency and sterling in the following table.

**AVERAGE PRICE PER TON OF TIN IN AUSTRALIA AND THE UNITED KINGDOM.**  
(£.)

Country.	1953.	1954.	1955.	1956.	1957.
Australia—in Australian currency (a) .. .. .	919	911	947	1,014	992
United Kingdom—in sterling (b) .. .. .	731	720	741	788	755

(a) Prices fixed by regulation *ex* smelters for sales of 10 cwt. or more or in ingots of 70 lb. or more to 21st April, 1953; average market prices thereafter. (b) Average spot market prices for standard tin.

6. **Employment in Tin Mining.**—The number of persons employed in tin mining is shown in § 13 (page 1049).

### § 6. Iron.

1. **General.**—Although iron ore is widely distributed throughout Australia, the only known ore bodies of large extent and high grade which are easily accessible are those situated at Iron Knob and Iron Baron, South Australia, and at Yampi Sound, Western Australia. Estimates of the high grade reserves at these centres place the quantities available at approximately 200 million tons and 100 million tons respectively. Bearing in mind the expansion of the iron industry in Australia, and the limitations of these reserves, the Commonwealth Government prohibited the export of iron ore from 1st July, 1938.

2. **Mine Production.**—(i) *Australia.* Production of iron ore for smelting purposes and estimated iron content are shown below for the years 1953 to 1957:—

**IRON ORE : PRODUCTION, AUSTRALIA.**  
(Tons.)

Particulars.	1953.	1954.	1955.	1956.	1957.
Production of Iron Ore ..	3,298,718	3,518,804	3,572,609	3,923,985	3,805,473
Estimated Iron Content ..	2,131,865	2,274,330	2,304,165	2,542,826	2,465,523

(ii) *New South Wales.* Since 1945, no iron ore has been mined in this State for conversion into pig-iron. For many years, South Australia has been the chief source of supply for New South Wales blast furnaces.

Small quantities of iron oxide produced in New South Wales are used by the various gas-works for purifying gas, and also in the manufacture of paper, and for pigments. These supplies are drawn chiefly from the deposits in the Port Macquarie Division. During 1957, 2,749 tons of oxide were won. In addition, four tons of magnetite were produced in 1957 for coal-washing.

(iii) *Victoria.* Deposits of iron ore exist in the Nowa Nowa area of East Gippsland, but much larger quantities of ore than are at present known will have to be proved if the area is to become an economic source of iron. In 1957, 2,300 tons of limonite (iron oxide) were produced at Buchan for gas purification purposes.

(iv) *Queensland.* Deposits of iron ore in the Constance Range area of north-west Queensland may prove to be the largest deposits in Australia. First indications were that the ore was too low in grade to warrant exploitation. Later investigations have been more promising and an extensive programme of drilling and detailed field mapping is now being carried out to evaluate the deposits. The output of 4,273 tons of iron oxide for 1957 came from the Townsville district and was used for cement manufacture.

(v) *South Australia.* The main production of iron ore in Australia is from the deposits worked by the Broken Hill Proprietary Co. Ltd. at Iron Knob and Iron Baron in the Middleback Ranges near Whyalla. Production in 1956 reached a record level of 3,389,237 tons (estimated iron content, 2,203,004 tons). Production from Iron Baron

commenced early in 1958 and it is planned to reach a rate of one million tons of ore annually. The presence of thirty million tons of high grade iron ore has been proved near the leases held by B.H.P. Co. Ltd. and it is proposed to offer the company new leases in this area covering 250 square miles.

(vi) *Western Australia.* The production of iron ore in Western Australia during 1957 was 416,236 tons with an estimated iron content of 262,519 tons. The major part of this production came from Yampi Sound, and was shipped to New South Wales for smelting. The Yampi Sound iron ore is of high grade but much of it is powdery and friable and a sintering plant was opened at Port Kembla, N.S.W., in 1957 to beneficiate the ore. The remaining production all came from Koolyanobbing.

(vii) *Tasmania.* There has been no production of ironstone in Tasmania since 1943 when seven tons were produced. In 1957, 5,775 tons of iron oxide were produced for cement manufacture and for use in gas purification.

(viii) *Northern Territory.* Extensive deposits of low grade iron-bearing material have been discovered in the Roper River area. With modern ore beneficiation methods, these deposits may have some economic significance.

3. *Imports.*—During 1957, 203,011 tons of iron ore were imported into Australia from all sources, compared with 14,052 tons in 1956. Imports of iron ore from New Caledonia were 202,982 tons in 1957, compared with 14,026 tons in 1956, the first year of imports from this source. This ore has a lower iron content than ore from the Middleback Range and Yampi Sound. It contains impurities such as chromium and nickel and at present it is blended with Australian ores for smelting.

4. *Sources of Production.*—(i) *Australia.* The production of pig-iron and steel ingots in Australia, of which New South Wales is the main producing State, is shown in the following table for each of the years ended 31st May, 1949 to 1958.

#### PIG-IRON AND STEEL : PRODUCTION, AUSTRALIA.

(Tons.)

Year Ended 31st May.	Pig-iron. (a)	Steel Ingots.	Year Ended 31st May.	Pig-iron. (a)	Steel Ingots.
1949 .. ..	1,044,957	1,178,010	1954 .. ..	1,826,711	2,116,813
1950 .. ..	1,097,635	1,217,971	1955 .. ..	1,868,841	2,208,708
1951 .. ..	1,313,332	1,443,831	1956 .. ..	1,910,521	2,320,289
1952 .. ..	1,430,027	1,521,386	1957 .. ..	2,097,349	2,853,501
1953 .. ..	1,691,693	1,801,028	1958 .. ..	2,283,817	3,105,586

(a) Includes pig-iron for castings; excludes ferro-alloys.

In 1958, eight blast furnaces were operating in Australia; three at Newcastle and three at Port Kembla, in New South Wales, one at Whyalla, South Australia, and one at Wundowie, Western Australia. During 1958, ingot steel was produced from 27 open-hearth furnaces (17 at Newcastle and 10 at Port Kembla) and from 10 electric furnaces (5 at Newcastle, 3 at Melbourne, 1 at Whyalla and 1 at Port Kembla).

(ii) *New South Wales.* The principal producers in Australia, both in New South Wales, are the Broken Hill Proprietary Co. Ltd. at Newcastle and Port Kembla and its subsidiary, the Australian Iron and Steel Ltd. at Port Kembla. The postwar expansion of the steel industry has concentrated major development work at Port Kembla. The hot-dip tinplate mill at Port Kembla began production in August, 1957 and plant capacity is at present 70,000 tons a year, or about 60 per cent. of present Australian requirements. It is proposed to increase capacity to 150,000 tons annually and to use electrolytic methods for plating. In June, 1957, work commenced on the building of a £9,000,000 coke manufacturing plant. The project includes a battery of ninety-six coke ovens and associated by-products chemical plant. A slabbing mill costing £8,750,000 with a capacity of two million tons of ingots a

year was completed in April 1958. At Newcastle, the new skelp mill commenced operations in February, 1958. This mill will produce high quality steel strip for processing into tubes and it will have a capacity of 400,000 tons annually. During 1956, the construction of an additional blast furnace at Port Kembla was commenced. When completed in 1959, its productive capacity of 600,000 tons of pig iron annually will at least equal the output of the world's largest blast furnace. In 1956, the B.H.P. Central Research Organization commenced activities at Newcastle. It has been designed to investigate problems in coal and ore beneficiation, fuel technology, iron and steel making, fabrication and heat treatment of steel, and the chemistry and physics of materials used in modern industry.

(iii) *South Australia.* At Whyalla in South Australia, in addition to the blast furnace production, The Broken Hill Proprietary Co. Ltd. produces a small quantity of steel ingots from an electric furnace. In March, 1958, it was announced that the B.H.P. Co. Ltd. would build a steel plant at Whyalla at an estimated cost of £30,000,000. The project will include added blast furnace capacity, steelmaking plant, rolling mills and associated works.

(iv) *Western Australia.* In Western Australia, the State-owned Wundowie Wood Distillation, Charcoal Iron and Steel Industry produces pig iron using charcoal for smelting instead of the non-coking local coal. This high grade iron is used for the manufacture of spheroidal graphite cast iron. The output of pig iron during the year 1956-57 amounted to 14,020 tons and during 1957-58 to 15,914 tons. At Kwinana in Western Australia, a steel rolling mill commenced operations in 1956. Billets are shipped from New South Wales steel works to Kwinana, and after cutting to fifteen foot lengths, they are heated in an oil-fired furnace and then broken down into merchant steel sections in the semi-continuous rolling mill. The capacity of this mill is over 50,000 tons of steel products annually.

5. *Production in Principal Countries.*—Particulars of the production in the principal countries and the estimated world total production during the years 1956 and 1957 according to figures published by the Mineral Resources Division of the United Kingdom Overseas Geological Surveys, are shown in the next table.

#### IRON AND STEEL: PRODUCTION IN PRINCIPAL COUNTRIES.

('000 Tons.) (a)

Country.	Pig-iron and Ferro-alloys.		Steel Ingots and Castings.	
	1956.	1957.	1956.	1957.
United States of America ..	69,264	72,141	102,872	100,638
U.S.S.R. .. .. .	35,200	36,400	47,800	50,200
Germany, Federal Republic ..	17,299	18,068	22,823	24,120
United Kingdom .. .. .	13,170	14,283	20,659	21,699
France .. .. .	11,298	11,727	13,187	13,873
Japan .. .. .	6,186	7,021	10,931	12,372
Italy .. .. .	1,964	2,170	5,814	6,680
Belgium .. .. .	5,679	5,499	6,211	6,177
China(b) .. .. .	4,700	5,400	4,280	5,300
Poland .. .. .	3,451	3,624	4,935	5,220
Czechoslovakia .. .. .	3,230	3,507	4,805	5,084
Canada .. .. .	3,402	3,525	4,737	4,498
Luxemburg .. .. .	3,261	3,315	3,401	3,438
Saar .. .. .	2,983	3,116	3,321	3,384
<b>Australia</b> .. .. .	<b>2,074</b>	<b>2,218</b>	<b>2,584</b>	<b>3,055</b>
Germany, Eastern .. .. .	1,549	1,636	2,696	2,850
Sweden .. .. .	1,389	1,520	2,361	2,444
India .. .. .	1,958	1,911	1,738	1,710
<i>Estimated World Total</i> ..	<i>197,800</i>	<i>207,700</i>	<i>278,100</i>	<i>287,200</i>

(a) Long tons.

(b) Estimated.

## § 7. Other Metallic Minerals.

1. Tungsten.—Tungsten ores occur in all States. Particulars of scheelite concentrates from King Island, in Bass Strait, the major producer, are included in Tasmanian production. Other important deposits of tungsten ores occur in Queensland, New South Wales, the Tasmanian mainland and the Northern Territory, but production from Victoria, South Australia and Western Australia has been comparatively unimportant. In recent years, the largest producer has been Tasmania, but with the cessation in August, 1958, of production at King Island due to the continued downward trend in world prices, future production in this State will be severely curtailed. Production of tungsten concentrates and contents during 1957 in each producing State and Territory is shown below:—

TUNGSTEN CONCENTRATES : PRODUCTION, 1957.  
(Tons.)

Particulars.	N.S.W.	Q'land.	Tas.	N. Terr.	Australia.
Scheelite Concentrate ..	(a) 2	2	1,445	..	1,449
WO <sub>3</sub> Content ..	1	1	948	..	950
Wolfram Concentrate ..	(a)(b)	30	550	77	657
WO <sub>3</sub> Content ..	(b)	19	391	49	459

(a) Dispatches from the mine (or sales) as distinct from production.

(b) Less than half the unit of quantity shown.

The following table shows production for Australia for the years 1953 to 1957:—

TUNGSTEN CONCENTRATES : PRODUCTION, AUSTRALIA.  
(Tons.)

Particulars.	1953.	1954.	1955.	1956.	1957.
Scheelite Concentrate ..	1,185	1,331	1,449	1,495	1,449
WO <sub>3</sub> Content ..	729	861	960	990	950
Wolfram Concentrate ..	1,008	722	788	877	657
WO <sub>3</sub> Content ..	672	511	522	592	459

2. Mineral Sands.—(i) *General.* In recent years, the growing world demand for titanium metal has brought about a rapid expansion of mineral sands mining in Australia. The recovery of mineral sands from Australian beaches commenced in 1933 when 550 tons of ilmenite were produced in Tasmania. This ilmenite proved unsuitable for pigment manufacture and operations ceased the same year. In 1934, operations to recover mineral beach sands commenced at Byron Bay in New South Wales. At first, the concentrates produced were mainly mixed zircon-rutile-ilmenite, but in 1941 electro-magnetic separators were installed to separate the ilmenite, and in 1943 electro-static separators were introduced to produce rutile concentrate. The Commonwealth Government banned the export of mixed concentrates in 1944, and all producers now turn out separate concentrates of rutile, zircon, ilmenite and monazite. Australia is the largest producer of rutile and zircon in the world.

(ii) *Titanium.* The main raw material for titanium metal is rutile, which is an oxide of titanium and the principal mineral recovered from eastern coast beach sands. Ilmenite, an oxide of iron and titanium, is used largely in pigment manufacture, but owing to the presence of chromium as an impurity, eastern coast deposits are unsuitable for this purpose. However, large scale operations to produce chromium-free ilmenite started in 1956 in the Bunbury-Capel district of Western Australia. Details of production of rutile and ilmenite and the titanium content thereof during the years 1953 to 1957 are shown in the following table:—

PRODUCTION OF TITANIUM (IN TERMS OF TiO<sub>2</sub>) IN AUSTRALIA.  
(Tons.)

Year.	Rutile Concentrate.		Ilmenite Concentrate.		Total TiO <sub>2</sub> Content.
	Quantity.	TiO <sub>2</sub> Content.	Quantity.	TiO <sub>2</sub> Content.	
1953 .. .. .	38,039	37,067	..	..	37,067
1954 .. .. .	44,659	43,011	469	230	43,241
1955 .. .. .	59,613	57,232	535	262	57,494
1956 .. .. .	96,816	93,242	4,274	2,260	95,502
1957 .. .. .	128,903	124,863	71,155	38,888	163,751

(iii) *Zircon*. Zircon was the main product when beach sand mining commenced in Australia, but consumption of zirconium has not increased as rapidly as world demand for titanium. Although production of zircon concentrate has increased in recent years in association with rutile, many producers are not now extracting saleable zircon concentrate. The production of zircon concentrate during the years 1953 to 1957 is shown in the following table:—

**ZIRCON PRODUCTION, AUSTRALIA.**

(Tons.)

State.	1953.	1954.	1955.	1956.	1957.
New South Wales .. ..	15,528	27,489	32,827	50,660	59,373
Queensland .. ..	11,679	13,964	15,846	21,798	29,188
<i>Total</i> .. ..	<i>27,207</i>	<i>41,453</i>	<i>48,673</i>	<i>72,458</i>	<i>88,561</i>
Zircon Content .. ..	26,858	40,920	48,209	71,769	87,703

3. *Cadmium and Cobalt*.—The sources of cadmium in Australia are lead and zinc concentrates. The cadmium content of these concentrates produced was 922 tons during 1956 and 979 tons in 1957. Most of the concentrates are treated at Risdon, Tasmania, and at Port Pirie, South Australia, for the extraction of cadmium. The remainder is exported.

Cobalt is present in zinc concentrate produced at Broken Hill, New South Wales, and at Rosebery, Tasmania. The cobalt is recovered in the form of cobalt oxide at the zinc refining plant at Risdon, Tasmania, and is sold as such to industry. The cobalt metal content of zinc concentrate produced was estimated at 59 tons in 1956 and at 68 tons in 1957.

Production of refined cadmium and cobalt oxide for the years 1953 to 1957 is shown in the following table:—

**CADMIUM (REFINED) AND COBALT OXIDE : PRODUCTION.(a)**

(Tons.)

Year.	Cadmium (Refined).			Cobalt Oxide. Extracted from Ores Mined in New South Wales.(b)
	Extracted from Ores Mined in—			
	New South Wales.	Tasmania.	Total.	
1953 .. ..	257	40	297	17
1954 .. ..	239	49	288	18
1955 .. ..	261	40	301	18
1956 .. ..	232	44	276	19
1957 .. ..	345	48	393	20

(a) Source: Bureau of Mineral Resources.

(b) Excludes less than a ton of cobalt oxide produced from Tasmanian ores in each of the years shown.

The figures shown in the table above refer to production in Australia only and do not include the metallic contents of cadmium and cobalt oxide contained in the ores and concentrates exported overseas.

4. *Manganese*.—There has been considerable expansion of manganese ore production in recent years, due mainly to the relaxation of some provisions of the embargo on export of manganese ores. Western Australia continues as the main producing State where activities were centred around Horseshoe in the Peak Hill District and Ant Hill and Mt. Sunday in the Pilbara District. Northern Territory production is at Mucketty near Renners Springs.

The following table shows the production of metallurgical grade and battery and other grades of manganese ore for the years 1953 to 1957:—

MANGANESE ORE PRODUCTION : AUSTRALIA.

(Tons.)

Year.	Metallurgical Grade.				Battery and Other Grades.			
	N.S.W.	Q'land.	W. Aust.	Australia.	N.S.W.	W. Aust.	N. Terr.	Australia.
1953 ..	1,015	43	30,457	31,515	1,428	..	..	1,428
1954 ..	749	138	26,448	27,335	867	..	..	867
1955 ..	1,071	78	44,194	45,343	551	..	1,462	2,013
1956 ..	986	311	56,032	57,329	527	202	1,326	2,055
1957 ..	917	1,239	73,058	75,214	546	221	1,029	1,796

5. *Other.*—The production, in 1957 (1956 shown in parentheses) of other metallic minerals worthy of note, is as follows:—

*Antimony.* The antimony content of antimony-bearing minerals produced was 1,209 tons (903 tons). Of this amount, 724 tons (616 tons) were in lead concentrate and 485 tons (287 tons) in 852 tons (547 tons) of antimony ore and concentrate.

*Bauxite.* 7,707 tons (10,329 tons) of bauxite ore were produced, mainly in New South Wales and Victoria. During recent years, extensive deposits of bauxite have been discovered on the west coast of Cape York Peninsula, Queensland, and on the Gove Peninsula and Wessel Islands of the Northern Territory. Extensive surveys in these and nearby areas are being carried out and reserves already proved have placed Australia among the large potential bauxite producers of the world. The Commonwealth Aluminium Corporation Pty. Ltd. has authority to prospect an area of about 2,500 square miles, and it plans to produce annually 1,500,000 tons of bauxite yielding 500,000 tons of alumina which will be exported.

*Beryllium.* Production of beryllium ore was 395 tons (318 tons) which came mainly from Western Australia where the Pilbara gold field was the main producing area. The beryllium oxide content of the ore was 4,567 units of 22.4 lb. (3,768 units).

*Chromite.* Production of chromite was 3,049 tons (6,096 tons) with chromic oxide content of 1,420 tons (2,624 tons). This production came from Rockhampton in Queensland and Coobina in Western Australia.

*Tantalite-Columbite.* The production of tantalite-columbite concentrate was 50,038 lb. (159,655 lb.) and the whole of this output came from Western Australia. The tantalum pentoxide and columbium pentoxide content of the concentrates was 23,499 lb. (85,690 lb.).

*Other.* Other metallic minerals produced in Australia in small quantities during 1957 were molybdenite concentrate, monazite concentrate, native osmiridium, and platinum concentrate.

## § 8. Coal.

1. *Mine Production.*—An account of the discovery of coal in each State appears in earlier issues of the Official Year Book (see No. 3, pp. 515–16). The quantity and value of the production in each State in Australia for each of the years 1953 to 1957 are shown in the following table. Of the total production of black coal in 1957, 70,720 tons were classified as semi-anthracite, 18,229,181 tons as bituminous and 1,619,195 tons as sub-bituminous.

## COAL PRODUCTION.

Year.	Black Coal.							Brown Coal.
	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.	Victoria.
QUANTITY ('000 tons).								
1953 ..	14,174	152	2,517	448	886	234	18,411	8,257
1954 ..	15,083	141	2,761	495	1,019	264	19,763	9,331
1955 ..	14,737	133	2,747	455	904	299	19,275	10,112
1956 ..	14,810	119	2,734	482	830	299	19,274	10,560
1957 ..	15,390	112	2,701	609	839	268	19,919	10,741
VALUE(a) (£'000).								
1953 ..	41,630	946	5,861	461	3,073	453	52,424	3,628
1954 ..	42,762	886	6,474	650	3,589	523	54,884	3,945
1955 ..	41,715	815	6,729	778	3,089	611	53,737	4,382
1956 ..	40,637	668	6,988	794	2,724	628	52,439	4,644
1957 ..	40,450	556	7,177	911	2,552	632	52,278	5,228

(a) At the mine.

The mining of black coal on a large scale by opencut methods first began in Australia at Blair Athol in Queensland, where in 1937, the first year of production, 18,494 tons were produced. Opencut mining of black coal was introduced in New South Wales in 1940, in Western Australia in 1943, in South Australia in 1944, and in Tasmania in 1950. The output from opencuts rose slowly up to 1943 when 119,406 tons were produced, increasing rapidly from 1944 and reaching an output of over four million tons in 1952. Since then however, the output from opencut mining has declined and in 1957 it was 2,031,403 tons only. This decline has been mainly due to the closing down of large opencuts in New South Wales, as overproduction of coal began to occur late in 1952. It is the policy of the Joint Coal Board that opencut mining should provide the quantity of coal by which underground mine production fails to meet total requirements.

The production of black coal from underground and opencut mines in each State for the years 1953 to 1957 is shown in the following table.

## BLACK COAL PRODUCTION : UNDERGROUND AND OPENCUT.

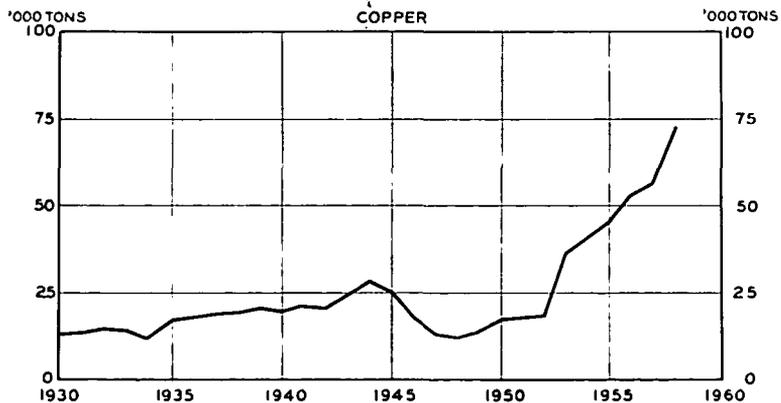
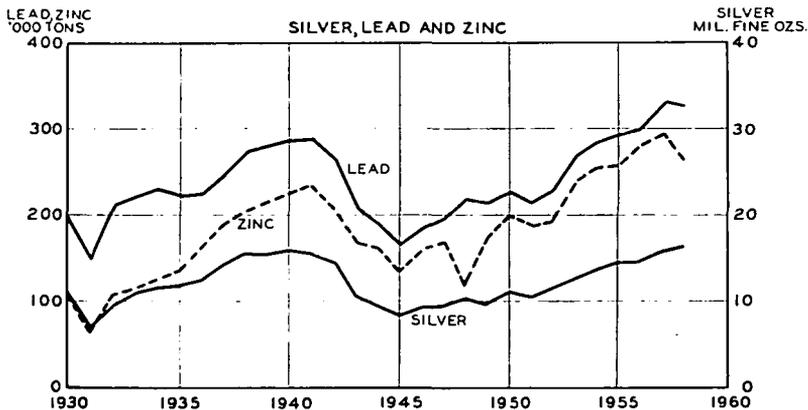
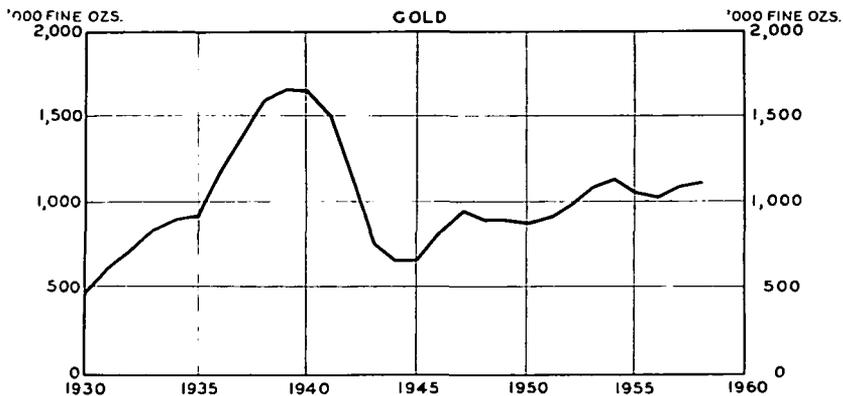
('000 Tons.)

Year,	Method of Mining.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Aust.
1953 ..	Underground ..	12,452	152	1,941	..	493	234	15,272
	Opencut ..	1,722	..	576	448	393	(a)	3,139
	Total ..	14,174	152	2,517	448	886	234	18,411
1954 ..	Underground ..	13,703	141	2,067	..	608	254	16,773
	Opencut ..	1,380	..	694	495	411	10	2,990
	Total ..	15,083	141	2,761	495	1,019	264	19,763
1955 ..	Underground ..	13,835	133	2,108	..	600	284	16,960
	Opencut ..	902	..	639	455	304	15	2,315
	Total ..	14,737	133	2,747	455	904	299	19,275
1956 ..	Underground ..	14,000	119	2,103	..	621	281	17,124
	Opencut ..	810	..	631	482	209	18	2,150
	Total ..	14,810	119	2,734	482	830	299	19,274
1957 ..	Underground ..	14,662	112	2,171	..	690	253	17,888
	Opencut ..	728	..	530	609	149	15	2,031
	Total ..	15,390	112	2,701	609	839	268	19,919

(a) Less than 500 tons.

MINE PRODUCTION OF PRINCIPAL METALS  
(METALLIC CONTENT OF MINERALS)

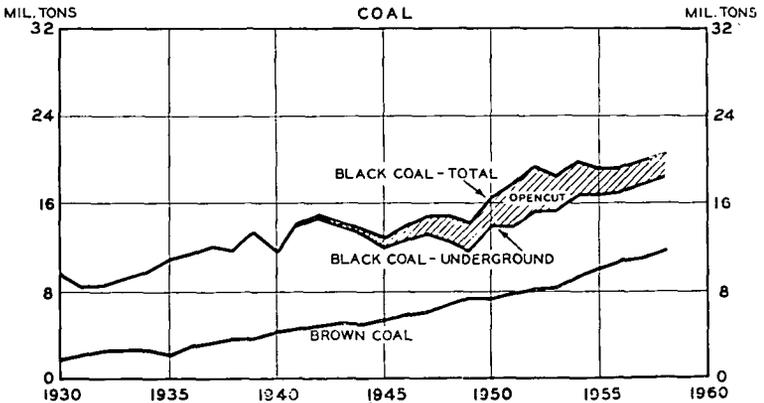
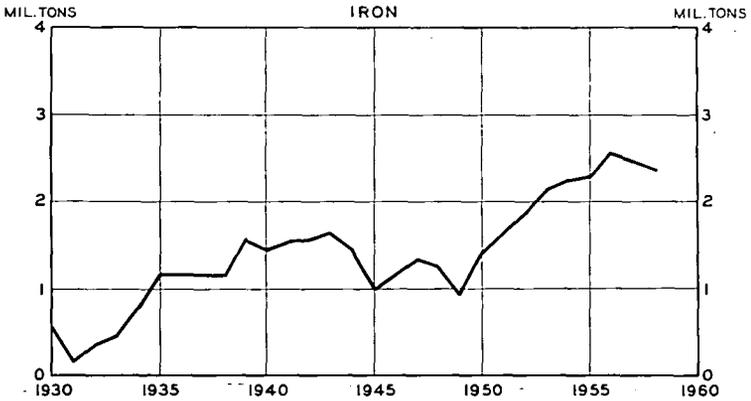
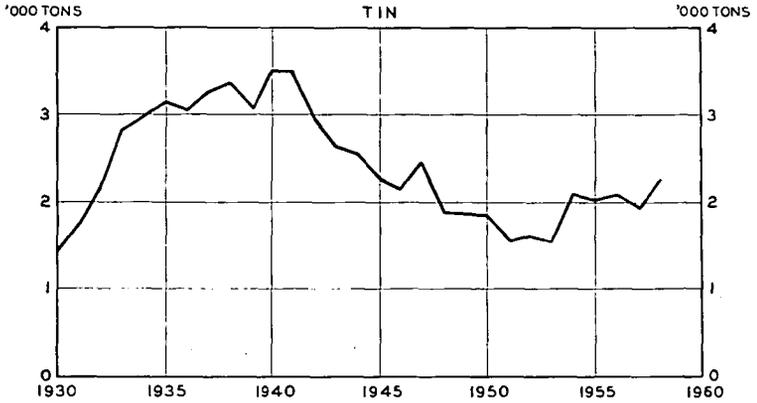
AUSTRALIA, 1930 TO 1958



# MINE PRODUCTION OF PRINCIPAL METALS AND PRODUCTION OF COAL

(METALLIC CONTENT OF MINERALS)

AUSTRALIA, 1930 TO 1958



2. Sources of Production.—(i) *New South Wales.* The coal deposits of New South Wales are the most important and extensively worked in Australia. The principal fields are known as the Northern, Southern and Western, and are situated in the vicinity of Newcastle, Bulli and Lithgow respectively.

The coal from the various districts differs in quality or, geologically speaking, rank—that from the Northern district being especially suitable for gas-making, household purposes and steam, while the product of the Southern and Western districts is essentially a steaming coal. The Permian Coal Measures in the Northern division are being worked extensively in the Hunter River Valley area, particularly in the vicinity of Maitland, Cessnock and, more recently, Muswellbrook. This district is the most important, from the aspect of coal mining, in Australia.

The following table shows particulars of New South Wales coal production classified according to rank and type of mining during the five years 1953 to 1957:—

COAL : PRODUCTION, NEW SOUTH WALES.  
(Tons.)

Particulars.	1953.	1954.	1955.	1956.	1957.
Semi-anthracite .. ..	.. ..	.. ..	1,658	.. ..	.. ..
Bituminous .. ..	14,164,603	15,065,979	14,718,426	14,792,853	15,376,240
Sub-bituminous .. ..	9,228	17,281	16,313	17,312	13,996
<i>Total</i> .. ..	<i>14,173,831</i>	<i>15,083,260</i>	<i>14,736,397</i>	<i>14,810,165</i>	<i>15,390,236</i>
Underground mines .. ..	12,451,741	13,703,289	13,834,824	13,999,615	14,662,155
Open-cut mines .. ..	1,722,090	1,379,971	901,573	810,550	728,081

(ii) *Victoria.* (a) *Black Coal.* Production of black coal in Victoria is restricted to the Gippsland district. The State Coal Mine at Wonthaggi is the main producer, the remaining production coming from small privately-owned mines. In 1957, production of bituminous coal was 111,569 tons compared with 118,827 tons in 1956.

(b) *Brown Coal.* The mining of brown coal in Australia is carried on only in Victoria, where extensive deposits exist; estimates place the available reserves at 40,000 million tons. Large-scale developmental projects are in progress and these, when completed, will greatly reduce the dependence on fuel from other States. In the past ten years, the output of brown coal in Victoria has doubled, and in 1955 it exceeded ten million tons for the first time. Of the 10,740,989 tons of brown coal produced in 1957, 9,831,217 tons, or 92 per cent., were won at the State opencuts at Yallourn.

The briquetting plant of the State Electricity Commission at Yallourn started operations in November, 1924, and the output, which in 1926 was 95,477 tons, had increased to 180,905 tons in 1930 and to 619,730 tons in 1957. Approximately two and a half tons of brown coal are required to make one ton of briquettes. In December, 1956, the Lurgi high pressure brown coal gasification plant at Morwell was opened. This plant is operated by the Gas and Fuel Corporation of Victoria and produces town gas which is sent to Melbourne through 103 miles of pipeline.

The table following shows the production and distribution of brown coal and the production of briquettes in Victoria for the years 1952-53 to 1956-57.

BROWN COAL : PRODUCTION AND UTILIZATION, VICTORIA.  
(\*000 Tons.)

Year.	Production.	Consumption as Fuel.			Consumption as Raw Material in Briquette Manufacture.	Briquettes Manufactured.
		Electricity Generation.	Briquette Factory.	Other Factories. (a)		
1952-53 .. ..	8,075	4,933	729	837	1,457	545
1953-54 .. ..	8,731	5,307	780	920	1,560	587
1954-55 .. ..	9,668	5,899	842	1,088	1,684	631
1955-56 .. ..	10,383	6,517	843	1,191	1,686	634
1956-57 .. ..	10,772	6,943	806	1,309	1,613	618

(a) Recorded consumption.

(iii) *Queensland.* The production of coal classified according to rank and type of mining during the years 1953 to 1957 was as follows:—

**COAL : PRODUCTION IN QUEENSLAND.**  
(Tons.)

Particulars.	1953.	1954.	1955.	1956.	1957.
Semi-anthracite ..	80,979	72,459	80,442	79,316	68,873
Bituminous ..	2,215,078	2,377,883	2,459,727	2,472,692	2,475,079
Sub-bituminous ..	220,755	310,468	206,996	182,651	157,625
<i>Total</i> ..	<i>2,516,812</i>	<i>2,760,810</i>	<i>2,747,165</i>	<i>2,734,659</i>	<i>2,701,577</i>
Underground mines ..	1,941,631	2,066,788	2,108,065	2,103,641	2,170,979
Open-cut mines ..	575,181	694,022	639,100	631,018	530,598

The principal coal-producing districts in Queensland are Ipswich, Clermont, Mount Morgan and Bowen; output from these areas in 1957 amounted to 2,338,484 tons or 87 per cent. of the total.

The opencut method of mining for black coal has advanced considerably in Queensland in recent years. In 1946, 106,444 tons (or 7 per cent. of total production) were won from opencuts while in 1954, 694,022 tons (25 per cent.) were mined in this manner. In 1957, the output from opencuts declined to 530,598 tons, or 20 per cent. of the total.

(iv) *South Australia.* Coal mined in South Australia is won by opencut methods at Leigh Creek, some 380 miles by rail north of Adelaide. This important deposit yields a low grade sub-bituminous coal of Triassic age, and has known reserves of about 380 million tons. However, this State relies to a great degree on bituminous coal from New South Wales to supplement the demand created by industrial expansion. In 1944, the first year of major production of the Leigh Creek mine, 34,620 tons were won. Production has risen considerably in more recent years, and amounted to 608,913 tons in 1957.

(v) *Western Australia.* The only coal deposits which have been developed on a commercial scale are at Collie in the south-west of the State. Collie coal is sub-bituminous in rank. Production in 1957 was 838,661 tons, compared with 830,007 tons in 1956. Although a large proportion of the coal produced in Western Australia comes from opencut mines, the amount available from these mines is limited, as present surveys estimate that only 8,000,000 tons can be extracted by opencut methods. In 1957, 148,779 tons, or 18 per cent. of the total production, were won by opencut mining.

(vi) *Tasmania.* Two periods of coal formation are represented in Tasmania. The older (Permo-Carboniferous) seams contain fairly high ranking semi-anthracitic coal, with a high sulphur content, but production from these mines, 1,847 tons in 1957, represents less than one per cent. of Tasmanian black coal output. The more recent Mesozoic coal of bituminous rank is mined in the north-east of the island, the Cornwall and Mt. Nicholas mines being the most prolific producers. In 1957, output amounted to 268,140 tons of which 15,032 tons came from opencut mining.

(vii) *Australia's Coal Reserves.* The latest available estimate of the actual and probable coal reserves of Australia is that prepared by the Coal and Lignites Panel of the Power Survey Sectional Committee of the Standards Association of Australia, and is shown in the following table.

**COAL RESERVES OF AUSTRALIA.**  
(Million Tons.)

State.	Anthracitic and Bituminous Coal.	Sub-bituminous Coal.	Lignites and Brown Coal.
New South Wales ..	11,000	500	..
Victoria ..	12	..	40,000
Queensland ..	4,000	3	50
South Australia ..	..	380	225
Western Australia ..	..	1,000	2
Tasmania ..	240	..	2

3. **Production in Principal Countries.**—The following table shows the production of the principal countries in 1956 and 1957 as published by the Mineral Resources Division of the United Kingdom Overseas Geological Surveys.

**COAL: PRODUCTION IN PRINCIPAL COUNTRIES.**

('000 Tons.)(a)

Country.	Black Coal.		Brown Coal and Lignite.	
	1956.	1957.	1956.	1957.
United States of America ..	470,443	460,210	2,570	2,328
U.S.S.R. .. .. .	298,900	322,000	123,500	134,000
United Kingdom .. .. .	222,006	223,628	..	..
Germany, Federal Republic ..	134,051	132,882	93,729	95,282
China(b) .. .. .	103,200	125,000	..	..
Poland .. .. .	93,646	92,610	6,085	5,862
France .. .. .	54,257	55,899	2,220	2,258
Japan .. .. .	45,819	50,914	1,496	(c)
India .. .. .	39,420	43,449	..	..
Union of South Africa .. .. .	33,071	34,219	..	..
Belgium .. .. .	29,088	28,627	..	..
Czechoslovakia .. .. .	23,041	23,799	45,568	50,210
Australia .. .. .	19,274	19,919	10,560	10,741
Saar .. .. .	16,818	16,195	..	..
Spain .. .. .	12,647	13,700	1,898	2,468
Netherlands .. .. .	11,469	11,196	265	283
Canada .. .. .	11,227	9,768	2,091	2,008
Germany, Eastern .. .. .	2,700	2,710	202,615	209,237
Hungary .. .. .	2,334	2,241	17,932	18,720
Yugoslavia .. .. .	1,213	1,208	15,618	16,515
<i>Estimated World Total</i> .. .. .	<i>1,654,000</i>	<i>1,700,000</i>	<i>556,000</i>	<i>580,000</i>

(a) Long tons.

(b) Estimated.

(c) Information not available.

4. **Exports.**—(i) *General.* The quantities and values of the overseas exports of Australian coal and of bunker coal for overseas vessels for the five years 1953-54 to 1957-58 are shown in the following table. These shipments were made mainly from New South Wales.

**COAL : OVERSEA EXPORTS AND BUNKER, AUSTRALIA.**

Year.	Oversea Exports.(a)		Bunker Coal for Oversea Vessels.	
	Quantity.	Value.	Quantity.	Value.
	Tons.	£	Tons.	£
1953-54 .. .. .	385,812	1,528,788	31,718	129,977
1954-55 .. .. .	291,226	1,147,441	25,363	111,625
1955-56 .. .. .	193,813	780,284	38,749	165,224
1956-57 .. .. .	545,101	2,196,044	9,065	44,116
1957-58 .. .. .	836,336	3,390,628	11,608	50,656

(a) Excludes bunker coal.

(ii) *New South Wales.* New South Wales is the principal Australian coal-producing State and, in addition to meeting requirements within the State, supplies considerable quantities of coal to other States and for export overseas as well as bunker coal for vessels calling at New South Wales ports. Of the total New South Wales coal production in 1957-58 (15,746,573 tons), 12,856,841 tons (81.6 per cent.) were available for consumption in the State, 1,914,588 tons (12.2 per cent.) were exported interstate and 786,000 tons (5.0 per cent.) were exported overseas as cargo coal, and 189,144 tons (1.2 per cent.) were supplied as bunker coal for interstate and overseas vessels.

5. **Consumption in Australia.**—Details of the production of black coal and its disposal in Australia are given in the following table for the years 1952-53 to 1956-57.

**BLACK COAL: PRODUCTION AND CONSUMPTION.**  
(<sup>'000</sup> Tons.)

Particulars.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Production(a) .. ..	18,545	19,424	19,352	19,033	19,711
Imports .. .. .	146	2	5	4	6
<b>Total</b> .. .. .	<b>18,691</b>	<b>19,426</b>	<b>19,357</b>	<b>19,037</b>	<b>19,717</b>
<i>Consumption as Fuel—</i>					
Electricity Generation .. ..	5,071	5,590	5,916	5,922	6,363
Factories .. .. .	3,097	3,367	3,329	3,101	2,977
Railway Locomotives(b) .. ..	3,110	3,208	3,112	2,963	2,690
<i>Bunker Coal—</i>					
Oversea Vessels .. .. .	43	32	25	39	9
Interstate Vessels .. .. .	229	228	218	198	181
<b>Total</b> .. .. .	<b>11,550</b>	<b>12,425</b>	<b>12,600</b>	<b>12,223</b>	<b>12,220</b>
<i>Consumption as raw material—</i>					
Gas works .. .. .	2,081	2,047	2,063	2,031	1,946
Coke works .. .. .	3,071	3,252	3,314	3,258	3,665
<b>Total</b> .. .. .	<b>5,152</b>	<b>5,299</b>	<b>5,377</b>	<b>5,289</b>	<b>5,611</b>
Exports (Oversea) .. .. .	256	386	291	194	545
Balance—Unrecorded consumption, other purposes(c)	1,733	1,316	1,089	1,331	1,341
<b>Grand Total</b> .. .. .	<b>18,691</b>	<b>19,426</b>	<b>19,357</b>	<b>19,037</b>	<b>19,717</b>

(a) Includes miners' and colliery coal.  
change in stocks.

(b) Government railways only.

(c) Includes net

After the 1939-45 War, it was found necessary to augment local supplies of black coal in Australia by increasing imports. The quantity imported reached a post-war peak of 597,866 tons in 1950-51, but since then has declined, as in recent years production has expanded considerably. Since 1952-53, exports have exceeded imports by a wide margin; in 1957-58, exports of black coal were 836,336 tons and imports were 9,335 tons.

6. Value at the Mine in New South Wales.—Particulars of the average values at the mine (or at screens or mine washeries where these are at a distance from the mine) of saleable coal for each district and for New South Wales as a whole are shown in the following table for the years 1953 to 1957. Saleable coal excludes miners' coal, coal consumed at the mines and refuse, etc., removed by the use of hand picking belts or at mine washeries. In calculating these values, coal won by producer consumers is also excluded and in respect of stocks of coal held at grass by the Commonwealth Government only actual sales have been taken into account. No deduction has been made in respect of excise duty operative from 1st November, 1949.

**AVERAGE SELLING VALUE AT THE MINE PER TON OF SALEABLE COAL :  
NEW SOUTH WALES.**

(s. d.)

Year.	Northern District.	Southern District.	Western District.	Average for State.
1953.. .. .	62 1	61 0	56 9	61 1
1954.. .. .	60 3	59 0	57 3	59 7
1955.. .. .	59 11	58 10	55 9	59 2
1956.. .. .	59 3	58 1	55 1	58 6
1957.. .. .	58 3	55 7	50 7	56 9

7. Values in New South Wales, United Kingdom and the United States of America.—The following table shows, for the years 1953 to 1957, average values of coal produced in New South Wales, Great Britain and the United States of America. The figures give an indication of changes in average value or price within each country but they do not necessarily show the relative levels as between the countries concerned.

**PRODUCTION VALUES OF COAL PER TON : NEW SOUTH WALES, UNITED KINGDOM AND UNITED STATES OF AMERICA.**

Country.	1953.	1954.	1955.	1956.	1957.
	s. d.				
New South Wales—Bituminous(a) .. .. .	61 1	59 7	59 2	58 6	56 9
United Kingdom—Deep mined(b) .. .. .	61 1½	63 6	68 0½	77 0	82 1
United States of America—Bituminous and lignite(c) ..	\$ 4.92	\$ 4.52	\$ 4.50	\$ 4.82	\$ 5.08

(a) Average selling value at the mine per ton of 2,240 lb.; the figures relate to saleable coal and include excise duty. (b) Average value in sterling at the mine per ton of 2,240 lb. (c) Average value in United States currency at the mine per ton of 2,000 lb.

8. **Employment in Coal-mines.**—The number of persons employed, both above and below ground, in coal-mines in each State for each of the years 1953 to 1957 is shown in the following table.

**COAL-MINES : PERSONS EMPLOYED.**

Year.	New South Wales.	Victoria.		Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
		Black.	Brown.					
1953 .. .. .	19,961	900	1,598	3,673	250	1,478	344	28,204
1954 .. .. .	19,979	786	1,598	3,638	270	1,583	358	28,212
1955 .. .. .	19,260	687	1,502	3,634	280	1,432	367	27,162
1956 .. .. .	17,918	610	1,566	3,568	260	1,190	349	25,461
1957 .. .. .	16,622	561	1,579	3,493	223	1,145	301	23,924

The year of maximum employment was 1926 when 31,774 persons were engaged in the coal-mines of Australia. Shortly after that year, the industrial depression and a prolonged stoppage of work on one of the principal fields of New South Wales during 1929 and 1930 seriously affected the figures of employment. After 1933, there was a gradual increase up to a level of about 23,000 which was maintained during the war years. There was a further increase after the war to 28,303 in 1952, but since then the number in employment has fallen again. In 1957, it was 23,924. In New South Wales in 1957, 10,895,051 tons of coal, or 74 per cent. of the total output of underground coal, were cut by machinery, compared with 3,594,000 tons or 32 per cent. in 1939. Similar details for other States are not available.

9. **Production of Black Coal per Man-shift.**—(i) *Underground Mines.* The following table shows particulars of estimated black coal output per man-shift worked, (a) at the coal face, and (b) by all employees, in respect of underground mines for each State concerned and for Australia for the years 1953 to 1957. These estimates have been calculated by the Joint Coal Board from data collected fortnightly in respect of coal production and the number of man-shifts actually worked. In South Australia, black coal is won only by open-cut mining.

**PRODUCTION OF BLACK COAL PER MAN-SHIFT : UNDERGROUND MINES.**  
(Tons.)

Year.	N.S.W.	Vic.	Q'land.	W. Aust.	Tas.	Australia.
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**PRODUCTION PER MAN-SHIFT WORKED AT COAL FACE.**

1953 .. .. .	9.72	2.09	6.37	4.86	6.15	8.49
1954 .. .. .	10.16	2.03	6.54	4.82	5.95	8.81
1955 .. .. .	10.76	2.13	6.61	4.74	6.54	9.24
1956 .. .. .	11.43	2.05	6.79	5.14	7.04	9.77
1957 .. .. .	13.19	2.01	7.13	5.88	7.60	11.02

**PRODUCTION PER MAN-SHIFT WORKED BY ALL EMPLOYEES.**

1953 .. .. .	3.08	0.81	2.53	1.67	3.00	2.84
1954 .. .. .	3.25	0.82	2.61	1.91	3.07	3.00
1955 .. .. .	3.39	0.86	2.66	2.06	3.08	3.14
1956 .. .. .	3.55	0.83	2.65	2.35	3.41	3.28
1957 .. .. .	3.99	0.85	2.82	2.77	3.76	3.65

(ii) *Opencut Mines.* In the next table, the Joint Coal Board's estimates of production of black coal per man-shift worked by all employees in opencut mines are shown for the years 1953 to 1957. There are no opencuts producing black coal in Victoria.

**PRODUCTION OF BLACK COAL PER MAN-SHIFT : OPENCUT MINES.**

(Tons.)

Year.	N.S.W.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1953 .. ..	8.51	10.97	(a) 3.57	5.37	9.25	6.92
1954 .. ..	8.97	12.27	(a) 4.52	4.71	7.91	7.31
1955 .. ..	9.18	11.42	6.02	5.77	7.78	8.11
1956 .. ..	10.36	13.06	6.72	6.37	8.56	9.19
1957 .. ..	11.11	12.17	9.89	6.04	7.68	10.25

(a) Figures prior to July, 1954, include man-shifts on other than mine work.

**10. Joint Coal Board.**—After the 1939–45 War, the Governments of the Commonwealth and New South Wales agreed to create jointly a coal authority with powers similar to, and in some respects wider, than those possessed under Commonwealth war-time legislation. Following this agreement, the Joint Coal Board was created and has functioned as from 1st March, 1947. Briefly, it is the responsibility of the Board to ensure that the coal of the State is conserved, developed, worked, distributed and used to the best advantage in the public interest, and to promote the welfare of the workers in the industry. Further details of the powers and functions of the Board are contained in earlier issues of the Official Year Book.

**§ 9. Coke and Other By-products from Coal.**

**1. Coke.**—The production of metallurgical coke in Australia was limited to about 250,000 tons per annum prior to the 1914–18 War. This was below local requirements and necessitated an annual import of about 27,000 tons. By 1920, production had risen to more than 500,000 tons, by 1938–39 to 1,164,873 tons, and in 1956–57 it reached the record level of 2,234,458 tons. Imports exceeded exports prior to 1952–53 but in 1952–53 and later years there has been a net export surplus. In 1956–57, exports amounted to 129,397 tons but decreased slightly to 112,760 tons in 1957–58. Imports were 8,206 tons in 1956–57 and 9,778 tons in 1957–58, but most of this tonnage is petroleum coke for use in the production of aluminium.

In addition to metallurgical coke referred to above (which is produced by specialized coke works), considerable quantities of coke are produced in gas works as a by-product of the manufacture of gas. Production in gas works in 1955–56 was 892,668 tons. To date, there has been no production of petroleum coke at Australian oil refineries.

In order to avoid duplication with coal values, the figures for coke have not been included in the general tables of mineral production in the early part of this chapter.

In the following table, particulars of the production of coke in coke works and gas works in Australia are shown for the years 1952–53 to 1956–57. The figures exclude output of coke breeze, which in 1956–57 amounted to 356,875 tons.

**COKE PRODUCTION : AUSTRALIA.**

(Tons.)

Industry.	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.
Coke Works .. ..	1,858,428	2,010,404	2,046,790	2,058,426	2,234,458
Gas Works .. ..	1,071,106	943,344	1,099,859	1,031,135	892,668
<b>Total</b> .. ..	<b>2,929,534</b>	<b>2,953,748</b>	<b>3,146,649</b>	<b>3,089,561</b>	<b>3,127,126</b>

**2. Other By-products from Coal.**—In addition to coke, other products are obtained from the treatment of coal by coke and gas works. Some of the main items produced, principally in coke and gas works, during 1956–57 (1955–56 in parentheses) were crude tar, 52,799,000 gallons (54,352,000 gallons); refined tar 27,209,000 gallons (25,914,000 gallons); and ammonium sulphate 110,898 tons (75,321 tons).

## § 10. Mineral Oils.

The existence of crude petroleum has been proved in Queensland, Victoria, Western Australia and recently in Papua. None of these discoveries has been proved to be in commercial quantities, but the discovery in Papua and shows at the well at Meda in Western Australia are encouraging.

The Commonwealth Government has set aside the sum of £500,000 annually for four years to encourage drilling for stratigraphic information. This is being used to subsidize drilling by oil companies in areas not previously investigated at depth.

The Petroleum Search Subsidy Act 1957-58 continued to attract many applications for subsidy and to the end of November, 1958, five applications for the financial year 1958-59 had been approved.

Drilling programmes are being carried out in all States of the Commonwealth except Tasmania, and in Papua and New Guinea. No drilling was undertaken in the Northern Territory in 1958. In the following table, details are given of the footage drilled in the search for oil both in the Commonwealth of Australia and in the Territories of Papua and New Guinea.

**FOOTAGE DRILLED IN THE SEARCH FOR OIL, STATES OF AUSTRALIA AND TERRITORIES OF PAPUA AND NEW GUINEA.(a)**

State or Territory.	1953.	1954.	1955.	1956.	1957.	1958.(b)
	feet.	feet.	feet.	feet.	feet.	feet.
New South Wales .. ..	..	..	9,338	4,608	8,729	16,357
Victoria .. ..	..	..	10,738	22,660	12,244	2,439
Queensland .. ..	3,965	22,581	58,668	92	15,343	5,081
South Australia .. ..	..	..	661	16,966	13,995	6,239
Western Australia .. ..	5,045	40,627	77,824	61,271	26,961	30,383
<b>Australia .. ..</b>	<b>9,010</b>	<b>63,208</b>	<b>157,229</b>	<b>105,597</b>	<b>77,272</b>	<b>60,499</b>
Territories of Papua and New Guinea.. ..	1,826	7,912	10,205	17,500	25,636	29,350

(a) Source: Bureau of Mineral Resources, based on figures obtained from State and Territory Departments of Mines.

(b) Subject to revision.

## § 11. Sulphur.

Sulphur, although produced in Australia as a content of certain metallic minerals, is itself non-metallic in character. Sulphides such as zinc concentrate and pyrite, which contain sulphur, are produced in appreciable quantities. There is no production of elemental sulphur (brimstone) in Australia. A large proportion of the zinc concentrate produced is exported and therefore lost to Australia for utilization of the sulphur content. The sulphur recovered in Australia is in the form of acid, most of which is used in the manufacture of fertilizers, mainly superphosphate. As this recovery does not at present satisfy local requirements, it is necessary to import elemental sulphur to meet the balance.

Pyrite ore and concentrate are obtained partly from direct mining at Nairne, South Australia, and at Norseman, Western Australia, and partly as a by-product of base metal mining at Mt. Morgan in Queensland, Captain's Flat in New South Wales, Mt. Lyell in Tasmania, and Kalgoorlie in Western Australia. There was no recorded production of pyritic ore in Australia during 1957; but the production of pyrite concentrate was as follows:—New South Wales, 14,196 tons; Queensland, 25,160 tons; South Australia, 68,169 tons; Western Australia, 57,918 tons; Tasmania, 63,682 tons; Australia, 229,125 tons.

The following table shows for the years 1953 to 1957 the production of monohydrate sulphuric acid (100 per cent.), and the sulphur content of this monohydrate acid produced.

**SULPHUR USED IN SULPHURIC ACID PRODUCTION: AUSTRALIA.**  
- (Tons.)

Item.	1953.	1954.	1955.	1956.	1957.
<i>Monohydrate Sulphuric Acid Produced</i> .. .. .	671,471	778,008	895,765	841,225	971,976
<i>Quantity of Sulphur in Monohydrate Acid produced from—</i>					
Sulphur (Elemental)(a) .. .. .	123,469	154,337	187,015	146,816	156,413
Zinc concentrate .. .. .	31,270	33,564	30,412	29,061	35,025
Lead concentrate .. .. .	..	..	..	16,090	18,272
Pyrite .. .. .	60,811	62,533	71,179	76,780	100,111
Spent Oxide .. .. .	3,973	3,973	4,295	4,643	4,744
Other Materials .. .. .	..	..	..	1,694	3,271
<i>Total</i> .. .. .	219,523	254,407	292,901	275,084	317,836

(a) All imported.

### § 12. Non-metallic Minerals.

1. **Asbestos.**—The production of asbestos in Australia at present is only sufficient to meet about one-sixth of domestic requirements. Production in recent years has been of two types, chrysotile (white) and crocidolite (blue), the former being the most important type economically. The deposits of chrysotile, however, are relatively small and widely scattered, and during 1957, it was produced mainly at Nunyerry and Lionel in Western Australia and at Baryulgil in New South Wales. Production of crocidolite, which is confined to the Hammersley Ranges in Western Australia, about 200 miles south-east of Roebourne, has expanded greatly in recent years. Large scale operations were commenced there in 1943 at Wittenoom Gorge by Australian Blue Asbestos Ltd. and reserves in seams over which the company holds leases are estimated at two million tons.

The production of chrysotile and crocidolite in Australia during the five years 1953 to 1957 is shown in the following table:—

#### PRODUCTION OF ASBESTOS : STATES.

(Short Tons of 2,000 lb.)

Year.	Chrysotile.			Crocidolite.	
	New South Wales.	Western Australia.	Australia.	Western Australia.	Australia.
1953 .. .. .	637	679	1,316	4,250	4,250
1954 .. .. .	690	339	1,029	4,249	4,249
1955 .. .. .	661	307	968	5,025	5,025
1956 .. .. .	697	852	1,549	8,160	8,160
1957 .. .. .	676	1,556	2,232	12,438	12,438

2. **Clays.**—Statistics of clay production in Australia are not entirely satisfactory, mainly because of differences between States in the classification of the various types of clays. In the following table, the recorded production of the main types of clays produced in each State of Australia is shown for the year 1957.

**PRODUCTION OF CLAYS : STATES, 1957.**  
(Tons.)

Type.	New South Wales.	Victoria.	Queensland	South Australia.	Western Australia.	Tasmania.	Total.
Bentonite ..	73		114		742		929
Brick Clay and Shale	1,531,572	(a)925,768	(a)204,841	(a)368,154	(a)417,098	(a) 83,707	63,531,140
Cement Clay and Shale ..	117,100	..	..	12,782	11,551	..	141,433
Damourite ..	..	..	..	650	..	..	650
Fireclay ..	102,508	28,848	8,526	21,865	17,647	..	179,394
Fuller's Earth ..	215	..	..	..	..	..	215
Kaolin ..	22,618	3,661	43	10,923	203	6,038	43,486
Stoneware Clay ..	75,132	..	152	36,715	..	..	111,999
Tile Clay ..	145,386	(c)	(c)	(c)	(c)	(c)	145,386
Other Clays ..	7,064	117,614	(c)	(c)	(c)	(c)	124,678

(a) Estimated. (b) Partly estimated. (c) Not available.

3. Gypsum.—There are very extensive deposits of gypsum in Australia, but only the more accessible and easily worked deposits have been exploited. These deposits lie in four main regions, (a) in New South Wales stretching from around Griffith to near Broken Hill, (b) in the north-west corner of Victoria, the south-west corner of New South Wales and adjoining parts of South Australia, (c) in South Australia on both sides of Gulf St. Vincent and extending to Lake MacDonnell in the west, and (d) between Perth and Kalgoorlie in Western Australia. The South Australian deposits are the most important and more than half of the total Australian production of gypsum in 1957 came from that State, where the main centres of production are Stenhouse Bay on Yorke Peninsula and Lake MacDonnell.

The building industry is the main user of the gypsum produced in Australia. The greater part is used in the manufacture of plaster and most of the remainder in cement manufacture. A small amount is also used as fertilizer. A considerable quantity is exported, mainly to New Zealand for use in the plaster industry, and to New Caledonia for use in nickel smelting operations.

The production of gypsum in Australia is set out in the following table for the five years 1953 to 1957.

**PRODUCTION OF GYPSUM : STATES.**  
(Tons.)

Year.	New South Wales.	Victoria.	South Australia.	Western Australia.	Australia.
1953 .. ..	71,819	36,286	181,640	40,247	329,992
1954 .. ..	128,790	75,012	194,772	41,142	439,716
1955 .. ..	136,356	89,190	204,522	39,946	470,014
1956 .. ..	94,203	83,024	263,136	27,121	467,484
1957 .. ..	101,491	68,647	274,945	33,352	478,435

4. Limestone.—Limestone is quarried in all States, being used mainly for the manufacture of cement. Other uses are in agriculture, the steel industry, as a metallurgical flux, and in the chemical industry.

The recorded statistics of limestone production in each State of Australia for the years 1955 to 1957 are shown in the following table. Details of limestone produced for use as building or road material are not included.

**PRODUCTION OF LIMESTONE(a): STATES.**  
(‘000 Tons.)

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
1955 ..	1,690	714	(b)	987	(b)	206	3,998
1956 ..	1,700	814	(b)	1,076	(b)	179	4,264
1957 ..	1,897	846	(b)	1,135	(b)	205	4,572

(a) Includes shell and coral. (b) Not available for publication.

5. Magnesite.—The major sources of magnesite at present are deposits at Fifield and Thuddunga in central New South Wales. Most of the output of magnesite in Australia is used for refractory purposes, particularly in the steel industry, and small amounts are used in chemical, paper, glass, rubber, and ceramic industries. Particulars of the production of magnesite in each State for the years 1953 to 1957, are set out in the table below.

**PRODUCTION OF MAGNESITE : STATES.**  
(Tons.)

Year.	New South Wales.	Victoria.	South Australia.	Western Australia.	Australia.
1953 .. .. .	45,769	572	36	20	46,397
1954 .. .. .	42,825	..	235	92	43,152
1955 .. .. .	57,262	..	412	..	57,674
1956 .. .. .	63,050	..	831	804	64,685
1957 .. .. .	83,271	..	202	..	83,473

6. *Mica*.—Almost all Australian production of muscovite mica comes from the Northern Territory, though small quantities of inferior grades have been obtained from most of the States. The centre of mica production in the Northern Territory is the Harts Range area about 130 miles north-east of Alice Springs, where mining has been carried on intermittently since 1892, and the Plenty River field, 50 miles north-east of Harts Range.

The Commonwealth Mica Pool—details of which are given in § 15, Government Aid to Mining, on page 1054—purchases all mica which is in accordance with certain specifications. The following table shows the quantity of muscovite mica produced in Australia during the five years 1953 to 1957.

**MUSCOVITE MICA PRODUCTION.**  
(lb.)

Particulars.	1953.	1954.	1955.	1956.	1957.
New South Wales—					
Scrap .. .. .	..	15,680	20,160	..	..
Northern Territory—					
Trimmed .. .. .	70,684	84,619	56,649	28,837	36,713
Crude and Film .. .. .	1,542	..	..	..	..
Scrap .. .. .	..	65,184	..	..	40,600

7. *Salt*.—Salt is obtained in Australia from evaporation of saline lakes and clay pans. Production satisfies local requirements and provides a considerable surplus for export. Recorded production in South Australia (the chief producing State) is shown in the following table for the years 1953 to 1957. Estimates of total Australian production are also shown.

**SALT PRODUCTION.**  
(\*000 Tons.)

Particulars.	1953.	1954.	1955.	1956.	1957.
South Australia .. .. .	239	304	291	332	339
Estimated Australian Total .. .. .	310	380	370	410	432

8. *Other Non-metallic Minerals*.—(i) *General*. Many other non-metallic minerals are produced in Australia in considerable quantities, and are listed separately in the following paragraphs.

(ii) *Barite*. The principal producing centre of first-grade quality barite is at Orparinna in the north Flinders Range in South Australia. The production of barite in Australia during 1957 was 9,778 tons, of which 5,415 tons came from New South Wales, 4,223 tons from South Australia and 140 tons from Western Australia.

(iii) *Diatomite*. Production of diatomite is carried on mainly in the eastern States of Australia. In 1957, 6,221 tons were produced, and of this total, New South Wales produced 4,966 tons.

(iv) *Dolomite*. Up to 1950, New South Wales was the main producer of dolomite, but in that year the Broken Hill Pty. Co. Ltd. opened up a large deposit of dolomite at Ardrossan in South Australia which now produces about 90 per cent. of the total output. In 1957, New South Wales produced 5,137 tons; Queensland, 5,493 tons; South Australia, 180,237 tons; Western Australia, 60 tons; and Tasmania, 1,176 tons, making an Australian total of 192,103 tons.

(v) *Felspar*. The main demand for felspar comes from the glass and ceramic industries. Most of the Australian production of felspar comes from New South Wales which produced 6,254 tons of the Australian total of 8,819 tons in 1957. Of the remainder, 1,565 tons came from South Australia, 995 tons from Western Australia and 5 tons from Queensland.

(vi) *Gemstones*. (a) *Diamonds*. Gem quality diamonds are not produced in Australia, but, in 1957, 312 carats of industrial diamonds valued at £4,030 were recovered during gold dredging operations on the Macquarie River in New South Wales.

(b) *Opals*. Most of the opals won in recent years came from the Coober Pedy and Andamooka fields in South Australia which produced opals worth £182,399 in 1957. Other production in 1957 was from Lightning Ridge in New South Wales, valued at £1,500, and the Quilpie district in Queensland, valued at £1,050.

(c) *Sapphires*. The Anakie field in Central Queensland is the only Australian producer of sapphires. Output in 1957 was valued at £20.

(vii) *Silica*. The production of silica is not recorded in Victoria and Northern Territory. The output of silica, which includes glass sand, quartz, quartzite, sand, sandstone, and silicious abrasives, but does not include production for use as building or road material, was 137,130 tons in New South Wales; 3,129 tons from Queensland; 13,802 tons in South Australia; 5,693 tons in Western Australia; and 6,552 tons in Tasmania, giving a total of 166,306 tons for those States during 1957.

(viii) *Sillimanite*. In 1957, 2,302 tons of sillimanite were produced in Australia. New South Wales contributed 1,491 tons and the remaining 811 tons came from South Australia.

(ix) *Talc*. The Australian output of talc (including steatite), was 14,360 tons in 1957. New South Wales produced 1,020 tons, South Australia 9,686 tons and Western Australia 3,654 tons.

(x) *Other*. Other non-metallic minerals produced in Australia in small quantities during 1957 were fluorite, garnet, glauconite, mineral pigments, peat (for fertilizer), pebbles for grinding, phosphate rock, pyrophyllite, serpentine and slate.

### § 13. Persons Engaged, Wages Paid and Accidents in Mining.

1. **Total Employment in Mining.**—The number of persons engaged in the mining industry in Australia fluctuates according to economic conditions generally, the price of industrial metals, the state of the labour market, and according to the permanence of new finds and the development of the established mines. The following table shows the numbers engaged in the various mining industries in each State in 1957.

EMPLOYMENT IN MINING(a), 1957.

Industry.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Metal Mining—</i>									
Gold Mining ..	111	347	136	(b)	5,385	..	224	..	6,203
Silver-Lead-Zinc Mining	6,690	(c)	(c)	(b)	(c)	809	(c)	..	10,348
Copper-Gold Mining ..	64	(c)	(c)	(b)	53	(c)	251	..	2,102
Tin Mining ..	95	(c)	326	..	38	388	(c)	..	856
Mineral Sands Mining	1,305	(c)	(c)	..	(c)	..	..	..	2,062
Other Metal Mining ..	56	(c)	(c)	420	322	(c)	45	..	1,311
<i>Total, Metal Mining</i>	<i>8,321</i>	<i>362</i>	<i>4,904</i>	<i>420</i>	<i>6,016</i>	<i>2,290</i>	<i>569</i>	<i>..</i>	<i>22,882</i>
<i>Fuel Mining, excl. Oil(d)</i>									
Black Coal Mining—									
Underground ..	16,357	561	3,353	..	1,145	301	..	..	22,345
Open-cut ..	265	..	140	223	..	..	..	..	..
<i>Total ..</i>	<i>16,622</i>	<i>561</i>	<i>3,493</i>	<i>223</i>	<i>1,145</i>	<i>301</i>	<i>..</i>	<i>..</i>	<i>22,345</i>
Brown Coal Mining ..	..	1,579	..	..	..	..	..	..	1,579
<i>Total, Fuel Mining</i>	<i>16,622</i>	<i>2,140</i>	<i>3,493</i>	<i>223</i>	<i>1,145</i>	<i>301</i>	<i>..</i>	<i>..</i>	<i>23,924</i>
<i>Non-metal (excluding Fuel) Mining</i>									
<i>Total, All Mining</i>	<i>26,054</i>	<i>2,829</i>	<i>8,648</i>	<i>1,374</i>	<i>7,598</i>	<i>2,748</i>	<i>603</i>	<i>(e)</i>	<i>49,854</i>
<i>Construction Material Quarrying(f)</i>									
<i>Total, All Mining and Quarrying ..</i>	<i>27,299</i>	<i>4,519</i>	<i>9,109</i>	<i>2,183</i>	<i>7,815</i>	<i>2,898</i>	<i>628</i>	<i>43</i>	<i>54,494</i>

(a) Average employment during whole year. (b) Not available for publication; included with "Other Metal Mining". (c) Not available for publication. (d) Oil Mining, where available, is included in "Non-metal Mining". (e) Not available for publication; included with "Construction Material Quarrying". (f) Incomplete.

The following table shows particulars of mining employment in Australia for the years 1953 to 1957. The figures show the average number of persons employed during the whole year.

## EMPLOYMENT IN MINING(a): AUSTRALIA.

Industry.	1953.	1954.	1955.	1956.	1957.
<b>Metal Mining—</b>					
Gold Mining .. .. .	7,050	7,192	6,753	6,488	6,203
Silver-Lead-Zinc Mining .. .. .	9,686	9,397	10,076	10,623	10,348
Copper-Gold Mining .. .. .	2,025	1,957	2,062	2,210	2,102
Tin Mining .. .. .	1,063	969	937	938	856
Mineral Sands Mining .. .. .	597	598	891	1,592	2,062
Other Metal Mining .. .. .	1,601	1,253	1,273	1,420	1,311
<b>Total, Metal Mining</b> .. .. .	<b>22,022</b>	<b>21,366</b>	<b>21,992</b>	<b>23,271</b>	<b>22,882</b>
<b>Fuel Mining, excluding oil(b)—</b>					
Black Coal Mining .. .. .	26,606	26,614	25,660	23,895	22,345
Brown Coal Mining .. .. .	1,598	1,598	1,502	1,566	1,579
<b>Total, Fuel Mining</b> .. .. .	<b>28,204</b>	<b>28,212</b>	<b>27,162</b>	<b>25,461</b>	<b>23,924</b>
<b>Non-metal (excluding Fuel) Mining</b> .. .. .	<b>2,946</b>	<b>2,914</b>	<b>2,943</b>	<b>2,984</b>	<b>3,048</b>
<b>Total, All Mining</b> .. .. .	<b>53,172</b>	<b>52,492</b>	<b>52,097</b>	<b>51,716</b>	<b>49,854</b>
<b>Construction Material Quarrying(c)</b> .. .. .	<b>3,803</b>	<b>4,121</b>	<b>4,197</b>	<b>4,329</b>	<b>4,640</b>
<b>Total, All Mining and Quarrying</b> .. .. .	<b>56,975</b>	<b>56,613</b>	<b>56,294</b>	<b>56,045</b>	<b>54,494</b>

(a) Average employment during whole year.  
 " Non-metal Mining".

(b) Oil Mining, where available, is included with  
 (c) Incomplete.

2. **Salaries and Wages Paid in Mining.**—Statistics of total salaries and wages paid in the mining and quarrying industry are now available from the annual industrial censuses of the industry taken from 1952 onwards. Salaries and wages paid in the mining and quarrying industries in Australia during each year 1953 to 1957 are shown in the following table. Information regarding rates of wages paid in the mining industry is shown in Chapter XII.—Labour, Wages and Prices (p. 415) and also in the *Labour Report*.

**SALARIES AND WAGES PAID IN MINING(a): AUSTRALIA.**  
 (£'000.)

Industry.	1953.	1954.	1955.	1956.	1957.
<b>Metal Mining—</b>					
Gold Mining .. .. .	6,291	6,450	6,344	6,551	6,422
Silver-Lead-Zinc Mining .. .. .	12,359	12,761	15,154	17,299	16,241
Copper-Gold Mining .. .. .	1,608	1,786	1,867	2,098	2,289
Tin Mining .. .. .	715	704	734	733	753
Mineral Sands Mining .. .. .	362	412	819	1,644	2,177
Other Metal Mining .. .. .	1,380	1,195	1,328	1,504	1,402
<b>Total, Metal Mining</b> .. .. .	<b>22,715</b>	<b>23,308</b>	<b>26,246</b>	<b>29,829</b>	<b>29,284</b>
<b>Fuel Mining, excluding oil(b)—</b>					
Black Coal Mining .. .. .	24,171	25,988	26,065	26,422	25,105
Brown Coal Mining .. .. .	1,483	1,557	1,761	1,649	1,640
<b>Total, Fuel Mining</b> .. .. .	<b>25,654</b>	<b>27,545</b>	<b>27,826</b>	<b>28,071</b>	<b>26,745</b>
<b>Non-metal (excluding Fuel) Mining</b> .. .. .	<b>1,684</b>	<b>1,693</b>	<b>2,270</b>	<b>2,401</b>	<b>2,517</b>
<b>Total, All Mining</b> .. .. .	<b>50,053</b>	<b>52,546</b>	<b>56,342</b>	<b>60,301</b>	<b>58,546</b>
<b>Construction Material Quarrying (c)</b> .. .. .	<b>2,007</b>	<b>2,045</b>	<b>2,439</b>	<b>2,738</b>	<b>3,219</b>
<b>Total, All Mining and Quarrying</b> .. .. .	<b>52,060</b>	<b>54,591</b>	<b>58,781</b>	<b>63,039</b>	<b>61,765</b>

(a) Excludes mines and quarries employing less than four persons.  
 available, is included with " Non-metal Mining".

(b) Oil Mining, where  
 (c) Incomplete.

3. **Accidents in Mining.**—Particulars of numbers of persons killed and injured in accidents in mines and associated treatment plants are recorded by State Mines Departments. Numbers injured are not reported on a uniform basis in all States as varying criteria are used in determining what constitutes injury for the purpose of these records. In 1957, 43 persons were recorded as having been killed and 1,525 as having been injured in mining (excluding quarrying) accidents. Of the total of 43 persons killed, 16 were in black coal mines, 10 in gold mines and 10 in silver-lead-zinc mines. Reported injuries were highest in black coal mines (445), gold mines (396), and silver-lead-zinc mines (400).

## § 14. Oversea Trade in Minerals and Metals.

Particulars of the quantity and value of imports and exports of the principal minerals and metals for Australia are shown in the following table for the years 1955-56, 1956-57 and 1957-58. In addition to the unfabricated metals shown, considerable quantities of partly fabricated metals (bars, rods, wire, etc.) enter into Australia's oversea trade.

## IMPORTS AND EXPORTS OF PRINCIPAL MINERALS AND METALS : AUSTRALIA.

Item.	Unit of Quantity.	1955-56.		1956-57.		1957-58.	
		Quantity.	Value. (£A.f.o.b.)	Quantity.	Value. (£A.f.o.b.)	Quantity.	Value. (£A.f.o.b.)
IMPORTS.							
<b>Minerals—</b>							
Antimony ore and concentrate .. .. .	cwt.	10,639	52,570	10,593	45,548	2,060	9,215
Asbestos .. .. .	cental	723,695	2,394,810	521,936	1,708,751	731,532	2,524,495
Chromium ore and concentrate .. .. .	cwt.	146,246	94,776	120,788	63,983	173,207	117,045
Coal .. .. .	ton	4,117	29,973	6,191	29,239	9,335	44,383
Coke .. .. .	.. .. .	3,444	53,191	8,206	125,229	9,778	166,777
Diatomite .. .. .	.. .. .	87,879	139,095	95,895	146,466	64,162	100,345
Industrial diamonds .. .. .	cwt.	258,321	543,657	192,295	420,539	221,346	464,134
Mica .. .. .	lb.	764,347	56,049	437,289	46,019	1,000,533	64,664
Sulphur .. .. .	ton	205,880	2,740,044	138,083	1,707,168	208,028	2,130,464
<b>Metals—</b>							
Aluminium (pigs, ingots, etc.) .. .. .	.. .. .	240,651	2,924,968	207,917	2,764,067	203,780	2,522,169
Copper pigs, ingots, blocks and powder .. .. .	.. .. .	94,791	2,087,810	66,019	1,171,474	32,708	437,520
Gold bullion (ingots, bar, etc.) .. .. .	fine oz.	175,649	2,745,143	143,852	2,270,632	169,119	2,631,443
Iron and Steel— Bar and rod .. .. .	cwt.	2,040,376	6,734,571	625,364	3,106,731	342,293	2,531,755
Ingots, blooms, slabs, etc. .. .. .	.. .. .	14,761	76,597	8,362	54,206	5,872	69,439
Nickel (pigs, ingots, etc. and powder) .. .. .	.. .. .	14,732	528,299	16,178	556,601	15,467	585,986
Tin .. .. .	.. .. .	10,358	471,761	16,599	803,498	22,201	1,025,553
EXPORTS.							
<b>Minerals—</b>							
Asbestos .. .. .	cental	155,633	693,521	262,307	1,043,486	225,464	1,371,312
Coal .. .. .	ton	193,813	780,284	545,101	2,196,044	836,336	3,390,628
Coke .. .. .	.. .. .	66,590	537,841	129,397	1,072,699	112,760	957,659
<b>Copper—</b>							
Ore and concentrate .. .. .	cwt.	63,809	314,767	382,975	1,356,636	380,673	879,089
Copper-lead dross, etc. and concentrate .. .. .	.. .. .	152,130	1,174,004	188,327	1,317,037	203,370	750,019
Lead and silver-lead ore and concentrate, etc. .. .. .	.. .. .	1,312,432	4,369,378	1,637,724	5,585,631	1,981,705	5,898,900
Rutile concentrates .. .. .	.. .. .	1,394,970	4,627,553	2,273,540	8,499,133	1,959,304	6,246,209
Tungsten (scheelite and wolfram concentrates) .. .. .	.. .. .	47,537	3,708,473	41,343	2,758,476	30,717	1,656,468
Zinc ore and concentrate, etc. .. .. .	.. .. .	5,823,602	4,647,977	5,902,684	5,067,900	5,736,880	4,065,464
Zircon concentrates .. .. .	.. .. .	1,094,007	596,022	1,839,239	1,130,402	1,225,578	774,832
<b>Metals—</b>							
Copper, blister .. .. .	.. .. .	291,170	5,845,048	311,924	5,109,509	330,295	3,193,632
Gold bullion (ingot, bar, dust, sheet, etc.) .. .. .	fine oz.	531,664	8,323,118	908,266	14,225,889	405,307	6,352,070
Iron and Steel— Bar and rod .. .. .	cwt.	143,476	362,369	549,698	1,437,201	446,957	1,106,777
Ingots, blooms, slabs, etc. .. .. .	.. .. .	19,742	22,587	34,734	82,186	50,579	146,906
Pig iron .. .. .	.. .. .	291,659	324,051	349,712	460,438	329,100	434,935
<b>Lead—</b>							
Pig .. .. .	.. .. .	2,922,883	19,560,181	3,347,804	22,915,913	3,281,454	15,820,747
Bullion .. .. .	.. .. .	596,231	4,639,155	1,070,623	8,263,757	970,929	5,582,381
Silver bullion (ingot, bar, dust, sheet, etc.) .. .. .	fine oz.	6,485,356	2,620,905	16,570,469	5,594,400	3,078,824	1,218,964
Zinc, ingots .. .. .	cwt.	674,295	4,107,141	793,514	4,665,974	604,200	2,623,792

Considerable quantities of metallic ores, concentrates, slags and residues are exported from Australia for refining overseas. The following table shows the quantities of such items exported during 1957-58 and their principal metallic content as estimated by assay.

**PRINCIPAL METALLIC CONTENT OF ORES AND CONCENTRATES EXPORTED  
FROM AUSTRALIA DURING 1957-58.**

Ore, Concentrate, etc.	Quantity Ex- ported.	Estimated Metallic Content.						
		Copper.	Gold.	Lead.	Silver.	Tin.	Tungsten (WO <sub>3</sub> Content).	Zinc.
		cwt.	cwt.	fine oz.	cwt.	fine oz.	cwt.	cwt.
Wolfram Ores and Concentrates	7,734	..	..	..	..	..	5,532	..
Scheelite Ores and Concentrates	22,983	..	..	..	..	..	15,145	..
Copper Ores and Concentrates	380,673	95,029	6,399	..	131,662	91	..	..
Copper-Lead Dross and Speiss	166,383	44,977	88	75,509	336,060	..	..	..
Other Copper Slags and Residues	27,137	4,019	..	81	39,760	74	..	337
Copper Matte	9,850	2,890	5	1,608	8,087	..	..	..
Lead Ores and Concentrates	1,942,119	30,566	17,295	1,296,888	2,176,698	68	..	132,360
Lead Slags and Residues	39,586	38	..	25,333	192	271	..	9
Zinc Ores and Concentrates	5,667,498	..	..	50,818	101,641	..	..	2,977,683
Zinc Slags and Residues	69,382	225	..	59	..	8	..	54,667
Tin Ores and Concentrates	3,239	52	..	..	..	2,148	..	..
Gold Ores and Concentrates	..	..	..	..	..	..	..	..
Blister Copper	330,295	326,448	..	..	..	..	..	..
Silver-Lead Bullion	970,939	..	..	963,323	3,991,803	..	..	..
<b>Total metallic contents</b>	<b>9,637,818</b>	<b>504,244</b>	<b>23,787</b>	<b>2,413,619</b>	<b>6,785,903</b>	<b>2,660</b>	<b>20,677</b>	<b>3,165,056</b>

**§ 15. Government Aid to Mining, and Mineral Control.**

1. Aid to Mining.—(i) *Commonwealth.* (a) *Assistance to marginal and sub-marginal gold mines.* Under the terms of the Gold-Mining Industry Assistance Act 1954, large producers received a subsidy of up to three-quarters of that portion of the cost of production in excess of £13 10s. per fine oz., the maximum rate of subsidy being limited to £2 per fine oz. Persons producing less than 500 fine oz. a year received a flat rate subsidy of £1 10s. per fine oz. regardless of the cost of production. The Act remained in force for two years from 1st July, 1954, and was extended for a further three years to 30th June, 1959. In 1957, the flat rate to small producers was increased to £2 per fine oz. and the maximum rate to large producers was increased to £2 10s. per fine oz.

(b) *Rewards for Discovery of Uranium Ore.* To encourage the search for and discovery of deposits of uranium ore, the Commonwealth Government approved the granting of monetary rewards up to a maximum of £25,000 for any one deposit.

(c) *Copper Bounty.* For particulars of the bounty paid on copper sold on the Australian market, see page 1028.

(d) *Bureau of Mineral Resources, Geology and Geophysics.* The Bureau of Mineral Resources, Geology and Geophysics has sections dealing with geology, geophysics, mining engineering, petroleum technology and mineral economics. The geological section provides geologists to conduct all surveys required in Commonwealth Territories, and makes detailed and regional surveys in conjunction with or by arrangement with the State Mines Departments, surveys of possible oil-fields in Australia and New Guinea, surveys of mines for which financial assistance is sought, and investigations of deposits of radio-active minerals. The geophysical section conducts investigations throughout Australia and New Guinea connected with the search for metalliferous, radio-active and other mineral deposits; investigations connected with exploration for coal, oil and water; regional magnetic and gravity surveys; engineering and military geophysics; and the operation of geophysical (magnetic and seismic) observatories. The Bureau works in close co-operation with the Mines Departments of the States. It has assumed full responsibility for geological and geophysical surveys in Commonwealth Territories, but suitable arrangements have been made to ensure that the local Administrations have the necessary technical advice directly available to them.

(e) *Diamond Drilling.* The drilling plant operated by the Bureau of Mineral Resources consists of two heavy, two medium and five light prospecting drills. These drills are used mainly in connexion with the Bureau's comprehensive programme of prospecting by aerial, geological, geophysical and geochemical methods.

(f) *Search for Oil.* No variation has been made in the policy described in Official Year Book No. 37, page 850, regarding the search for petroleum throughout Australia and its Territories. In addition to its activities set out in that Year Book, the Bureau of Mineral Resources, Geology and Geophysics in Canberra tests bore cores for density, porosity, permeability and fluid content on behalf of companies engaged in drilling for oil. The Bureau also maintains three portable rotary plants for scout boring for geological information.

The Commonwealth Government has encouraged the search for oil in Australia, Papua and New Guinea; details of the efforts made are outlined in earlier issues of the Official Year Book and in § 10, Mineral Oils (p. 1045).

(g) *Ore-dressing and Mineragraphic Investigations.* These investigations are conducted by the Commonwealth Scientific and Industrial Research Organization as required by the industry. Ore-dressing investigations are carried out at the Ore-Dressing Laboratory, situated in the Department of Mining, University of Melbourne, and at the Ore-Dressing Laboratory, Kalgoorlie, situated at the School of Mines. The Mineragraphic Investigations Section is located in the Geology Department, University of Melbourne.

These two groups of laboratories perform complementary services—the Mineragraphic Investigations Section assesses microscopically the state of dispersion and the mineral association of ore bodies while the Ore-Dressing Laboratories investigate the composition of ores and provide advice on suitable methods for their full-scale treatment. Much of this research is carried out on a co-operative research basis with the mining industry.

(ii) *States.* (a) *General.* In addition to free assays and determinations of rocks and minerals carried out for prospectors by the Mines Departments of the States and Territories, technical officers of these departments provide advice to the mining and allied industries where required, carry out field examinations of mining prospects, advise on exploration and development, select sites for water supply, and in general give a free technical service to the mining industry.

(b) *New South Wales.* State aid to assist metalliferous mining may consist of grants to assist the prospecting and/or mining for gold and minerals and for the purchase, removal and installation of mining plant or equipment.

(c) *Victoria.* Loans may be granted to assist prospecting and development or the purchase of machinery. The Mines Department has stamp batteries in different parts of the State to crush ore for prospectors at nominal rates. Small mining companies may avail themselves of these facilities. Drilling with diamond, rotary and percussion drills is carried out by the Mines Department for mining companies and for general mineral exploration. A survey of the State's underground water reserves is in progress, in conjunction with the opening up of town water supplies from underground sources for which new deep drilling equipment has been obtained.

(d) *Queensland.* The Mines Department maintains a treatment works for tin ores, etc., at Irvinebank, an assay office at Cloncurry and diamond-drilling plants in several parts of the State. The Venus State Mill at Charters Towers is available for the treatment of gold-bearing ores. In addition, many departmental compressor plants, pumping plants and other mining equipment are provided and made available on hire on the principal mining fields.

(e) *South Australia.* The Department of Mines provides the following services and facilities to the mineral industry:—(i) Hire of boring plants and mining equipment; boring and testing of mineral deposits; financial subsidies in approved cases for prospecting and mining development; development of sub-surface water supplies for farming, pastoral, irrigation and mining purposes; purchase of basic metal ores from prospectors. (ii) Geological examination of mineral deposits, water supply, dam, foundation and drainage problems; guidance on mining legislation; publication and issue of geological bulletins and maps. (iii) Chemical and metallurgical analytical and assay investigation; testing and treatment of ores and minerals; petrographic, mineragraphic and radiometric determinations. Pilot scale metallurgical and chemical treatment plants are maintained and operated for the development of mineral extraction processes.

(f) *Western Australia.* Assistance is given to prospectors to the extent of £4 10s. 0d. a week south of the 26th parallel of latitude, and of £5 10s. 0d. a week north of that parallel; also provision is made of some tools required for prospecting.

There are twenty-one State batteries operating throughout the gold-fields for the treatment of ore from prospectors and small mine-owners, at a nominal charge. A cartage subsidy is also granted to such operators sending ore to State batteries for treatment.

Provision is made for loans to mine-owners who require assistance to develop mines. The Government also has a drilling scheme, financing mine-owners on a £1 for £1 basis.

(g) *Tasmania.* The Department of Mines provides financial assistance to mining lessees for the purchase of plant and machinery, for sinking, repairing or dewatering of shafts, for construction of dams and water races, for testing and proving a deposit of any mining product, for developmental work and for diamond and other types of drilling.

Other assistance is rendered to the industry by geological and engineering advice and through ore-dressing research into metallurgical recoveries and the selection and design of treatment plant.

(h) *Northern Territory.* In order to encourage the development of the mining industry, the Northern Territory Administration provided Government batteries at Tennant Creek, Hatches Creek, and Maranboy for the treatment of miners' ores. The Hatches Creek battery is the only one in operation at the present time but, because of the low price of wolfram, little crushing is done. The Tennant Creek battery has been reconstructed and was reopened in September, 1958, but the re-opening of the Maranboy battery will depend

on a revival of small scale tin mining at that centre. The crushing charges are subsidized by Government grants. In addition, the Administration provides cartage subsidies and financial advances to encourage miners to carry out developmental work. Roads and water supply services are provided and maintained for mines under active development throughout the Territory.

2. **Control of Minerals.**—(i) *Mica Production.* The Commonwealth Mica Pool purchases mica won in the Harts Range and Plenty River mica fields, Northern Territory, thus ensuring the miners a ready market for their output at fixed prices and also permitting an orderly distribution of mica to the trade. The Pool is controlled by a Committee of Management consisting of representatives of the Commonwealth Government, producers and consumers.

(ii) *Control of Exports of Metals and Minerals.* Certain metals and minerals produced in Australia are subject to export control for one or more of the following reasons:—

- (a) the necessity of conserving resources (e.g., iron ore and manganese);
- (b) inadequacy of local production to fulfil domestic demand (e.g., mica);
- (c) the strategic importance of the minerals (e.g., beryllium ores, concentrates and metal; monazite; uranium ore, concentrates, residues and metal; mica).

Mixed concentrates of beach sand minerals are prohibited exports, but rutile, zircon and ilmenite may be exported.

(iii) *Radio-active Minerals.* Since the discovery of the possibility of using atomic energy, considerable attention has been paid to the occurrence of uranium in Australia. To encourage the search for and discovery of deposits of uranium ore, the Commonwealth Government grants monetary rewards for such discoveries.

Up to the end of 1949, important deposits had been found only in the north-eastern part of South Australia where the Mt. Painter and Radium Hill fields had been investigated, largely by the South Australian Government, but in that year the presence of uranium was discovered in the Rum Jungle district of the Northern Territory, and investigations carried out by the Commonwealth Bureau of Mineral Resources, Geology and Geophysics in the years 1949–1952 proved that these deposits were of substantial importance.

Towards the end of 1952, the Commonwealth Government placed the Rum Jungle deposits under the control of Territory Enterprises Pty. Ltd., a subsidiary of Consolidated Zinc Corporation Limited, to carry on the investigations on its behalf and to mine and treat the ore. The treatment plant at Rum Jungle was officially opened on 17th September, 1954. Work ceased on 30th September, 1958, at White's open-cut, the scene of the original discovery at Rum Jungle. Work is still proceeding at Dyson's open-cut and some smaller ore bodies.

In South Australia, the South Australian Government extensively explored the Radium Hill deposit by underground development and diamond drilling. A primary treatment plant was erected at the mine and went into operation in November, 1954; the concentrate is transported to a plant at Port Pirie, completed in mid-1955, where it is further reduced. During 1952, arrangements were completed between the Governments of the United States of America, South Australia and the Australian Commonwealth, for the purchase of ores by the United States.

The construction of a plant for the extraction of uranium oxide at Mary Kathleen in north-west Queensland commenced in 1956. By the end of 1957, a township had been built, and a dam constructed. Operations in the plant started in June, 1958, and the mine was officially opened by the Prime Minister on 27th October, 1958.

Uranium deposits were found in the South Alligator River area in 1953. As a result of prolonged exploration and development, sufficient ore was proved to justify a treatment plant. Following negotiations between the United Kingdom Atomic Energy Authority and producers in the area, a contract has been arranged for the purchase of uranium oxide by the Authority. A gold plant in the neighbourhood was under conversion at the end of 1958 to treat the uranium ore.

The Bureau of Mineral Resources is carrying out further airborne scintillograph surveys and extensive geological, geophysical and geochemical surveys and diamond drilling operations, with a view to discovering further deposits and to assessing the value of known deposits.

During 1953, Commonwealth Legislation was enacted to set up an Atomic Energy Commission which is responsible, in an overall sense, for the production and utilization of uranium in Australia. This Act, the Atomic Energy Act of 1953, supersedes the Atomic Energy (Control of Materials) Act of 1946, but retains a provision of that Act which provides for control of substances which could be used for production or use of atomic energy. It gives the Commonwealth power to acquire such substances in their natural state and in waste materials from mining operations, to carry on mining and other operations necessary for the recovery of such substances, and to pay compensation for such acquisition. It also gives the Commonwealth power to obtain possession of such substances held by any person.

Further reference to the Atomic Energy Commission appears in Chapter XXX.—Miscellaneous.

## CHAPTER XXVIII.

## DEFENCE.

## § 1. Department of Defence.

1. **Introduction.**—At the outbreak of the 1939–45 War, the Department of Defence comprised the three Fighting Services and a Central Secretariat. In November, 1939, separate Departments, each with its own Minister, were created for the control and administration of the Navy, Army and Air Force. The Defence Department as then reconstituted retained responsibility for over-all defence policy and for the conduct during the war of the business of the War Cabinet, set up in September, 1939, and the Advisory War Council, set up in October, 1940. These bodies ceased to function after the war.

2. **Functions and Organization.**—(i) *Functions.* Subject to the authority of Cabinet, the Minister and Department of Defence are responsible for:—

- (1) The formulation and general application of a unified defence policy relating to the Defence Forces and their requirements, including:—(a) co-operation in British Commonwealth and regional defence and the defence aspect of the Charter of the United Nations; (b) the supply aspect of defence policy, including the review of production programmes and capacity; (c) the scientific aspect of defence policy; and (d) the financial requirements of defence policy, and the allocation of funds made available.
- (2) The defence aspect of armistice and peace terms, control commissions, and forces of occupation.
- (3) Matters of policy or principle and important questions having a joint Service or inter-Departmental defence aspect.
- (4) The defence aspect of questions relating to the organization and machinery for:—(a) co-operation in British Commonwealth defence; (b) co-operation in regional security, including obligations under the United Nations Charter; (c) higher direction in war; and (d) higher direction of the Services.
- (5) The Commonwealth War Book, which is a summary of national plans for an emergency as developed in Departmental War Books.
- (6) The administration of inter-Service organizations, such as the joint intelligence machinery.
- (7) The defence aspect of:—the strength and organization of the forces, higher appointments in the Services, honours and awards.
- (8) Advice on the military aspect of civil defence.

(ii) *Organization, higher defence machinery, the control of the joint Service machinery and the Secretariat of the Council of Defence.* The joint Service and inter-Departmental advisory machinery of the Department consists of various committees headed by the Defence Committee, the Chiefs of Staff Committee, the Defence Administration Committee and the Joint War Production Committee.

The Defence Committee is a statutory body consisting of the Secretary, Department of Defence, who is Chairman, the Chairman of the Chiefs of Staff Committee, the Chiefs of Staff of the three Services, the Secretary, Prime Minister's Department, the Secretary, Department of External Affairs, and the Secretary to the Treasury. Its function is to advise the Minister for Defence on:

- (a) The defence policy as a whole and also to co-ordinate military, strategic, economic, financial and external affairs aspects in framing defence programmes.
- (b) Matters of policy or principle and important questions having a joint Service or inter-Departmental defence aspect.
- (c) Such other matters having a defence aspect as are referred to the Committee by or on behalf of the Minister for Defence.

The main responsibility of the Chiefs of Staff Committee in peace is the preparation of strategic appreciation and military plans. The functions of the Defence Administration Committee, in addition to the regular review of the progress of the Defence Programme, relate to the co-ordination and integration of Service activities and the improvement of methods and organization. The function of the Joint War Production Committee is, briefly, to examine the relation between strategic plans and their requirements to ensure that the war potential for them exists. The major committees subordinate to the Defence Committee and/or the Chiefs of Staff Committee comprise the Principal Administrative Officers Committee (Maintenance and *Matériel*), the Principal Administrative Officers Committee (Personnel), the Defence Research and Development Policy Committee, the Joint Planning Committee, the Joint Intelligence Committee and the Joint Administrative Planning Committee.

(iii) *Defence Business Board.* In view of the heavy defence expenditure, the Government, in July, 1953, established the Defence Business Board in the Department of Defence. The Board deals with business matters of common interest to the three Services, or important subjects on which the collective advice of the Board is desired. The Board comprises businessmen who serve in a part-time honorary capacity and consists of an independent chairman and deputy chairman and the business advisers of the three Service Departments.

3. *Basis of Current Defence Policy.*—The main strategic factors affecting current defence policy may be summarized as follows:—

(i) *Likelihood of War.* Because of the nuclear deterrent, it is believed that global (or full scale) war is unlikely to occur as the result of deliberate planning, but could occur, with little warning, as the result of miscalculation in periods of tension or in limited war. The most likely wars are limited wars (armed conflict short of global war) which could occur with little warning. Hostile powers will probably continue to seize every opportunity to attain their aims by cold war techniques, such as infiltration, subversion and armed insurrection.

(ii) *Area of Primary Strategic Interest.* South East Asia is of great strategic importance to Australia, whose primary effort will be directed to that area in cold, limited or global war.

(iii) *Collective Defence.* The defence of South East Asia and Australia is to be sought through the concept of collective security. For this reason Australia is participating in regional arrangements such as SEATO and ANZUS, and arrangements for Commonwealth co-operation. Such arrangements are entirely in accord with the United Nations Charter.

4. *The Defence Programme.*—(i) *Programme.* The level of national defences must be adequate to enable Australia to meet her regional and home defence responsibilities. The proportion of national resources that can be allotted to defence is, however, affected by the concurrent demands of the programmes of national development, industrial expansion and migration, which add to our basic defence capacity. The main emphasis in the current Defence Programme will continue to be the provision of regular forces, highly trained, well equipped, mobile and readily available. Simultaneously, a sound basic defence organization, including adequate reserve forces, is being maintained to permit rapid expansion in an emergency. The activities of the armed services are being examined with a view to employing common services to the greatest possible extent where economy and efficiency might be enhanced. Equipment used by Australian forces will be standard or compatible as far as possible with that used by United States forces, with whom they are associated in defence arrangements. The defence programme provides for the acceleration of the naval construction programme with emphasis on anti-submarine capabilities and the maintenance of a regular army brigade group, equipped with the most modern weapons available. Mobility will be greatly increased by the procurement of 12 modern C120 Hercules transport aircraft for the R.A.A.F. The R.A.A.F. is being equipped with the U.S. Sidewinder air-to-air guided missile and preliminary investigations are being made for the introduction of a ground-to-air guided weapon. Two control and reporting units are being established and further units are planned. The Army is currently being supplied with the new F.N. 30 rifle. The army brigade group will be additional to the infantry battalion in Malaya and the Citizen Military Forces will be maintained at an adequate strength.

In the field of research and development, Australia is making its principal contribution through the Long Range Weapons Establishment which is a joint United Kingdom-Australian effort for the testing of guided weapons. The executive authority for this project is the Department of Supply which is also responsible for the provision of the material requirements of the forces including the manufacture and supply of munitions and aircraft.

The estimated cost of the defence programme for 1958-59 was £190 million.

(ii) *Financial.* Details of defence expenditure for 1957-58 and the allocation of the Defence Vote for 1958-59 are set out in the two tables which follow:—

**ALLOCATION OF DEFENCE VOTE OF £190,000,000 FOR 1958-59.**  
(£'000.)

Service or Department.	Maintenance.	Capital Material Requirements, Machinery, Plant and Equipment.	Capital Buildings, Works and Acquisition of Sites.	Total Expenditure.
Defence .. .. .	1,022	34	32	1,088
Navy .. .. .	32,440	8,364	1,597	42,401
Army .. .. .	47,120	12,077	4,315	63,512
Air .. .. .	40,555	13,763	4,984	59,302
Supply .. .. .	14,617	3,109	4,031	21,757
Other Services .. .. .	696	684	560	1,940
<b>Total .. .. .</b>	<b>136,450</b>	<b>38,031</b>	<b>15,519</b>	<b>190,000</b>

**DEFENCE EXPENDITURE, 1957-58.**  
(£'000.)

Service or Department.	Maintenance.	Capital Material Requirements, Machinery, Plant and Equipment.	Capital Buildings, Works and Acquisition of Sites.	Total Expenditure.
Defence .. .. .	864	35	32	931
Navy .. .. .	31,231	10,320	1,572	43,123
Army .. .. .	46,120	6,892	3,841	56,853
Air .. .. .	42,885	9,234	3,255	55,374
Defence Production .. .. .	4,009	2,205	6,015	(a) 12,229
Supply .. .. .	12,382	879	2,379	15,640
Other Services .. .. .	595	166	186	947
<b>Total .. .. .</b>	<b>138,086</b>	<b>29,731</b>	<b>17,280</b>	<b>185,097</b>

(a) The Department of Defence Production was abolished as a separate Department and its functions taken over by the Department of Supply on 23rd April, 1958; separate expenditure records were maintained, however, until the end of the financial year.

(iii) *Personnel Strengths.* The personnel strengths of the Services at 31st December, 1958 were:—

Category.	Navy.	Army.	Air Force.	Total.
Permanent Forces .. .. .	(a) 10,425	21,339	15,217	46,981
Citizen Forces—				
Volunteers .. .. .	8,377	(b) 17,154	853	26,384
National Service Personnel .. .. .	3,702	(c) 35,618	(c)	39,320
<b>Total Citizen Forces</b> .. .. .	<b>12,079</b>	<b>52,772</b>	<b>853</b>	<b>65,704</b>
<b>Total Permanent and Citizen Forces</b> .. .. .	<b>22,504</b>	<b>74,111</b>	<b>16,070</b>	<b>112,685</b>

(a) Excludes 23 cadet midshipmen not on pay. (b) Excludes 1,486 on Army Supplementary Reserve. (c) Excludes 61,416 Army and 10,517 Air Force National Service personnel who have completed training and are on the reserve.

5. *Australian Forces Serving in Malaya.*—Australia has participated with the United Kingdom and New Zealand in the Commonwealth Strategic Reserve in Malaya since it was first established in 1955. At the request of the Government of the Federation of Malaya, the Strategic Reserve continues to be stationed in that country and to assist in the campaign against the communist terrorists.

The Australian contribution to the Strategic Reserve comprises the following forces—  
*Navy*—Two destroyers or frigates. An aircraft carrier also pays an annual visit, and additional ships would be provided in an emergency.

*Army*—An infantry battalion with supporting arms, and reinforcements in Australia.

*Air Force*—A fighter wing of two squadrons (Sabres) and a Canberra bomber squadron were deployed to Malaya during the latter part of 1958 and the early part of 1959.

These forces play a valuable role in the cold war and are ready to meet the demands of an emergency.

6. **National Service Training.**—Under the National Service training scheme, every male person, other than those mentioned below, ordinarily resident in Australia, who, on or after 1st November, 1950, attains the age of 18 years, is required to register for National Service when called upon to do so by notice published in the *Commonwealth Gazette*. The first registration took place in May, 1951, and since then successive groups of eighteen-year-olds have been required to register, usually at six-month intervals.

Exemption from the liability to register is confined to certain diplomatic personnel and officials in the service of international bodies, members of the permanent forces, and aboriginal natives of Australia. Exemption from the liability to undergo training may be granted to theological students, ministers of religion, members of religious orders, conscientious objectors, and registrants suffering from certain prescribed physical or mental disabilities.

Registrants not exempted from service are liable to be called up for training provided they attain the standard of medical fitness required. Deferment may be granted for limited periods to students or apprentices so as to avoid undue interruption to their studies or trade training and to registrants who can establish before a court that their call-up would cause exceptional hardship to themselves, their parents or dependants. Early in 1955, provision was made to defer the call-up of registrants living outside approved C.M.F. training areas and to rural workers permanently engaged full-time on a rural holding in the production of food or raw materials.

In 1957, a new selection procedure was introduced. This is in the form of a ballot conducted shortly after each new age group is called upon to register. Registrants included by ballot are regarded as available for call up subject to the existing rules and procedures for exemption and deferment. Those excluded by ballot are granted deferment.

Up to and including the intakes in January, 1957, training was carried out in all three Services. Since that date all training has been carried out in the Army and the total number called up each year reduced from 34,000 to 12,000. Up to the time when training in the Navy and Air Force was abandoned, the total numbers called up for training in those services were Navy 6,967 and Air Force 22,267. Up to the latest Army intake in January, 1959, the total number called up for service in the Army was 189,757.

The total Army training liability is 140 days consisting of an initial continuous training period of 77 days and 21 days part-time and camp training in each of the following three years. Trainees remain on the Reserve of the Citizen Military Forces for five years from the date of call-up. The normal times for call-up are in January, May and August of each year.

Provision is made to safeguard the rights of registrants called up for training, notably with regard to reinstatement in civilian employment. There is no statutory obligation on employers to make up any difference between the civil and service pay of employees who are undergoing training, but some employers do so voluntarily.

## § 2. Naval Defence.

1. **Administration.**—The Royal Australian Navy is administered, under the Naval Defence Act 1910–1952, by the Naval Board, which consists of the Minister for the Navy, four Naval Members, and the Secretary, Department of the Navy.

2. **Historical.**—Prior to 1901, naval defence systems were organized under the State Governments: information regarding these systems is given in *Official Year Book No. 2*, page 1084. An outline of the development of Australian Naval policy is given in *Official Year Books No. 3*, page 1060, and *No. 12*, page 1012. An account of the building of the Australian Navy, its cost, the compact with the Imperial Government, and other details appears in *Official Year Book No. 15*, pages 921–923. The growth and the activities of the Royal Australian Navy during the 1939–45 War are shown in *Official Year Book No. 36*, pages 1023–1027.

3. **Link with the Royal Navy.**—The strong links with the Royal Navy are maintained by a constant exchange of officers for extended tours of duty, and by a full exchange of information and ideas. A liaison staff is maintained by the Royal Australian Navy in London, and by the Royal Navy in Australia. Advanced training and staff courses in the United Kingdom are provided by the Royal Navy for Royal Australian Navy Officers.

4. **Strength of the Fleet.**—Ships in Commission at June, 1959, were:—

*H.M.A. Fleet.*

- 1 Aircraft carrier.
- 6 Destroyers.
- 3 Fast Anti-submarine frigates.
- 5 Frigates.
- 7 Auxiliary Vessels.

5. **Personnel.**—The authorized establishment strength of the Royal Australian Navy has been pegged at 12,800 comprising 1,519 officers and 11,281 ratings. At 31st December, 1958, the actual strength of the Naval Forces, permanent and reserves, serving full-time, was 1,257 officers and 8,850 ratings including 100 native ratings of the Papua and New Guinea Division of the Royal Australian Navy. 42 cadet midshipmen were undergoing training at the Naval College. 11 Officers and 265 ratings were serving in the Women's Royal Australian Naval Service. Reserve strength comprised 1,323 officers and 10,756 ratings, serving part-time.

6. **Women's Royal Australian Naval Service.**—The established personnel strength of the W.R.A.N.S. is 14 officers and 370 ratings; they serve in the shore establishments in the following categories: Radio-operators, Regulating, Writers, Stores assistants, Sick Berth Attendants, Motor Transport Drivers, Wrans (Radar Plot), Cooks and Stewards.

7. **Reserve Training.**—Members of the Royal Australian Naval Reserve carry out limited training at night or on Saturday afternoons, plus 13 days annual continuous training; engagements are for 3 years and pay is on a par with that of the Permanent Naval Forces. Special courses and service of longer duration are available to selected members. The Royal Australian Fleet Reserve consists of former ratings of the R.A.N., R.N., or a Dominion Navy whose obligation to perform training is determined by the length of their permanent naval service.

8. **Fleet Air Arm.**—The Fleet Air Arm of the Royal Australian Navy maintains two front line squadrons, embarked in the operational carrier, H.M.A.S. *Melbourne*. This ship is fitted with an angled deck, steam catapult and mirror deck-landing sights. Training and support squadrons for H.M.A.S. *Melbourne's* Sea Venom Jet all-weather fighter and ground attack aircraft and Gannet turbo-prop anti-submarine aircraft are based at the Naval Air Station H.M.A.S. *Albatross* at Nowra, New South Wales.

9. **Ship Construction and Repair.**—Provision is made for the maintenance in Australia of a ship construction and repair industry capable of rapid expansion in war. Under the present programme, two anti-submarine frigates are fitting out and two more of the same type are under construction.

Two general purpose vessels and one Sea-air rescue craft are also under construction.

10. **Naval College.**—The Royal Australian Naval College, transferred from Jervis Bay, A.C.T., to Flinders Naval Depot in 1930, was re-established at Jervis Bay in January, 1958, and was commissioned as H.M.A.S. *Creswell*.

11. **Training Establishments.**—Flinders Naval Depot, at Crib Point, Westernport, Victoria, is the basic training establishment for ratings in the permanent forces, while several advanced training schools are established in Sydney, New South Wales. The Apprentice Training Establishment at Quaker's Hill, New South Wales, provides secondary education as well as training in trades in which the lads will be employed during their service in the Royal Australian Navy. Trainee pilots for the Fleet Air Arm graduate as pilots at Royal Australian Air Force establishments, then proceed to the Royal Australian Air Station, Nowra, for operational training. Observers are at present trained in Royal Navy schools but training will recommence at Nowra this year.

12. **The Australia Naval Station.**—Defined limits of the Australia Station are as follows:—

*Eastern—*

From 3° 30' North, 169° East, south to 1° South, thence east to 170° East, thence south along this meridian to 30° South, thence to 45° South, 160° East, thence south along this meridian.

*Northern—*

From 3° 30' North, 169° East, west to 125° East, thence south to the Coast of Celebes, thence west along the Coast of Celebes to 120° East, thence south along this meridian to 10° South, thence west to 78° East.

*Western—*

From 10° South, 78° East, south along this meridian.

13. **Ships Service Outside Australian Waters.**—During the year ended June, 1958, H.M.A. Ships *Melbourne*, *Anzac*, *Tobruk*, *Voyager*, *Quickmatch*, *Queenborough* and *Quiberon* served on the Far East Station as units of the Commonwealth Strategic Reserve, with Headquarters at Singapore. H.M.A. Ships *Vendetta* and *Swan* made visits beyond the limits of the Australia Station.

14. **Papua and New Guinea Division of the Royal Australian Navy.**—A Papua and New Guinea Division of the Royal Australian Navy, consisting of native ratings, was inaugurated in July, 1951, as a separate part of the Permanent Naval Forces for employment in Papua and New Guinea and adjacent waters.

15. **Ships of the Royal Australian Navy.**—The following ships were in commission or in reserve in June, 1959:—

## SHIPS OF THE ROYAL AUSTRALIAN NAVY, JUNE, 1959.

Vessel.	Description.	Displacement.
<b>In Commission—</b>		
<i>Melbourne</i> .. .. .	Aircraft Carrier .. .. .	Tons. 15,680
<i>Anzac</i> .. .. .	Destroyer .. .. .	2,436
<i>Tobruk</i> .. .. .	" .. .. .	2,436
<i>Vampire</i> .. .. .	" .. .. .	2,789
<i>Vendetta</i> .. .. .	" .. .. .	2,789
<i>Voyager</i> .. .. .	" .. .. .	2,801
<i>Warramunga</i> .. .. .	" .. .. .	2,012
<i>Queenborough</i> .. .. .	Frigate .. .. .	2,020
<i>Quiberon</i> .. .. .	" .. .. .	2,020
<i>Quickmatch</i> .. .. .	" .. .. .	2,020
<i>Diamantina</i> (Training) .. .. .	" .. .. .	1,489
<i>Gascoyne</i> (Training) .. .. .	" .. .. .	1,489
<i>Swan</i> (Cadets Training) .. .. .	" .. .. .	1,060
<i>Barcoo</i> (Survey) .. .. .	" .. .. .	1,477
<i>Warrego</i> (Survey) .. .. .	" .. .. .	1,060
<b>In Reserve—</b>		
<i>Sydney</i> .. .. .	Aircraft Carrier .. .. .	15,740
<i>Hobart</i> .. .. .	Cruiser .. .. .	7,100
<i>Arunta</i> .. .. .	Destroyer .. .. .	2,012
<i>Barwon</i> .. .. .	Frigate .. .. .	1,489
<i>Burdekin</i> .. .. .	" .. .. .	1,489
<i>Condamine</i> .. .. .	" .. .. .	1,537
<i>Culgoa</i> .. .. .	" .. .. .	1,537
<i>Hawkesbury</i> .. .. .	" .. .. .	1,489
<i>Macquarie</i> .. .. .	" .. .. .	1,553
<i>Murchison</i> .. .. .	" .. .. .	1,537
<i>Quadrant</i> .. .. .	" .. .. .	2,020
<i>Shoalhaven</i> .. .. .	" .. .. .	1,537
<i>Ararat</i> .. .. .	Ocean Minesweeper .. .. .	768
<i>Bunbury</i> .. .. .	" .. .. .	768
<i>Bundaberg</i> .. .. .	" .. .. .	797
<i>Colac</i> .. .. .	" .. .. .	768
<i>Cootamundra</i> .. .. .	" .. .. .	768
<i>Cowra</i> .. .. .	" .. .. .	789
<i>Fremantle</i> .. .. .	" .. .. .	768
<i>Gympie</i> .. .. .	" .. .. .	768
<i>Kapunda</i> .. .. .	" .. .. .	768

SHIPS OF THE ROYAL AUSTRALIAN NAVY, JUNE, 1959—*continued.*

Vessel.	Description.	Displacement.
<i>In Reserve—continued.</i>		Tons.
<i>Rockhampton</i> .. .. .	Ocean Minesweeper ..	768
<i>Sirahan</i> .. .. .	” ” .. ..	768
<i>Wagga</i> (Training) .. .. .	” ” .. ..	768
<i>Under Dockyard Control—</i>		
<i>Parramatta</i> .. .. .	Frigate (building) .. ..	..
<i>Yarra</i> .. .. .	” ” .. ..	..
O 2 .. .. .	” ” .. ..	..
O 5 .. .. .	” ” .. ..	..

## § 3. Military Defence.

1. *State Systems.*—A detailed historical account of the Australian defence forces prior to Federation appears in Official Year Book No. 2, pages 1075–1080. *See also* Official Year Book No. 12, page 999.

The strength of the military forces of the States on 31st December, 1900 (the eve of Federation) was:—New South Wales, 9,338; Victoria, 6,335; Queensland, 4,028; South Australia, 2,932; Western Australia, 2,696; Tasmania, 2,024; total for Australia, 27,353. This total is exclusive of cadets, reservists and rifle club members.

2. *Commonwealth Systems.*—(i) *General.* Under the terms of the Constitution Act 1900, the Commonwealth took over control of defence matters in March, 1901. The growth of the Commonwealth Military Forces may be considered to have taken place in sixteen phases. For particulars of the phases which cover the period from the welding together of the military forces of the States into one homogeneous army in 1902 up to the decision to increase the training strength of the militia to 70,000 in the year before the 1939–45 War (phases 1–7), *see* Official Year Book No. 36 and earlier issues.

Phases 8–10, covering the period immediately prior to, and just following, the outbreak of the 1939–45 War, relate to the initial steps necessary to put the Australian Military Forces on a war-time basis, and to its organization into commands.

The eleventh phase, in January, 1942, was the division of Northern, Eastern and Southern Commands into separate commands and base headquarters to handle operational and administrative matters respectively, and the twelfth phase was the revision of the machinery for command administration of lines of communication areas. The thirteenth phase was the appointment of Lieutenant-General Sir Iven Mackay as G.O.C.-in-C. Home Forces commanding the forces in Northern, Eastern and Southern Commands. The fourteenth phase covered the period following the outbreak of war with Japan and the entry of United States of America Forces into the South-West Pacific Area, and related to the appointment of General Sir Thomas Blamey as Commander-in-Chief, Australian Military Forces, the cessation of the Military Board, and the replacement of the system of commands and bases by the field army and lines of communication areas. In March, 1943, First and Second Armies took over from Queensland, New South Wales and Victoria Lines of Communication Areas the command of all coast and static anti-aircraft artillery defences and training establishments. On 16th June, 1944, Western Command was re-established and took over the combined responsibilities of Third Australian Corps and Western Australia Line of Communication Area.

The fifteenth phase was the re-introduction in March, 1946, of the Military Board and the organization of commands and military districts, and the sixteenth phase was the commencement of the National Service Training Scheme in August, 1951 (*see* § 1, para. 6 above and sub-para. (iv) (c) following).

For greater detail on phases 8–14, *see* Official Year Book No. 38 and earlier issues.

(ii) *Population of Military Age, 30th June, 1958.* The following particulars show the estimated numbers of males of military age in the population of Australia as at 30th June, 1958. The total number of cadet age, 14 and under 18, was 300,861; of citizen soldier age, 18 and under 26, 522,221; and 26 and under 35, 682,047; making a total of 1,505,129 aged 18 and under 35, which is considered the best period for military service. In addition, there were 1,510,823 males 35 and under 60 in Australia at 30th June, 1958.

(iii) *Allotment of Units.* Under the Command Organization (see above), units are raised on a territorial basis, each State supplying its proportion of the personnel required for the fighting services. Commands and all formations and units under them conform generally to State boundaries as follows:—Northern Command, Queensland; Eastern Command, New South Wales; Southern Command, Victoria; Central Command, South Australia; Western Command, Western Australia; Tasmania Command and Northern Territory Command. New Guinea is the responsibility of Northern Command.

(iv) *Military Training Systems.* (a) *General.* Particulars of the military training systems in operation prior to the 1939–45 War, first on a compulsory basis and later voluntary, will be found in Official Year Book No. 38 and earlier issues.

The current plan (1958–59) for the Australian Regular Army is based on an average strength of 22,100 full time duty personnel (excluding civilians) and a Citizen Military Force of 49,500, including National Servicemen.

(b) *The Australian Cadet Corps.* The Australian Cadet Corps is a voluntary organization comprised of School Cadet units. It serves as a training ground to provide, to some extent, the future officers and non-commissioned officers of the Australian Military Forces, and, as such, occupies an important position in the scheme of national defence. School Cadet units are raised at educational establishments in all States of the Commonwealth. The minimum age for enrolment is the year in which the applicant reaches the age of 14 years, and cadets, who in the large majority of schools receive a free issue of A.M.F. pattern uniform, may remain in the Cadet Corps until they cease to be pupils of the educational establishments concerned. A few units retain their own pattern school uniform and are not issued with A.M.F. pattern uniforms. Provision is made for the appointment of officers, cadet under-officers, warrant and non-commissioned officers on an authorized establishment scale from within school units.

The establishment of the whole Corps is 35,000 all ranks, and at 31st December, 1958, comprised 274 School Cadet units with a posted strength of 31,174 all ranks.

(c) *National Service Training Scheme.* Under the National Service Training Scheme (see § 1, para. 6 above) the Army was initially required to train 29,250 trainees a year, effected by three intakes each of 9,750 trainees in January, April and August. The first intake commenced training in August, 1951. As from the second intake of 1957, the annual intake has been reduced to 12,000.

(v) *Women's Services.* In November, 1950, approval was given for the enlistment of women into the Australian Regular Army on a limited scale. Enlistment commenced immediately into the Australian Women's Army Corps. During June, 1951, the Australian Women's Army Corps was re-designated the Women's Royal Australian Army Corps (W.R.A.A.C.). Members are employed in establishments in direct substitution for male soldiers. The Women's Services in the Australian Regular Army now comprise two Corps only:—(a) Royal Australian Army Nursing Corps; (b) Women's Royal Australian Army Corps.

Women's Services have been incorporated in the Citizen Military Forces and it is proposed to raise sixteen companies of the Women's Royal Australian Army Corps and twelve companies of the Royal Australian Army Nursing Corps, a total of 3,900 all ranks, within the C.M.F.

At December, 1958, six companies of the Women's Royal Australian Army Corps and eight companies of the Royal Australian Army Nursing Corps, a total of approximately 1,900 all ranks, had been raised within the C.M.F.

(vi) *Malaya.* On 1st April, 1955, the Commonwealth Government announced its decision to dispatch troops to Malaya as an Australian component of the British Commonwealth Far East Strategic Reserve. 2nd Battalion, The Royal Australian Regiment and 105th Field Battery, Royal Australian Artillery and other minor units embarked from Australia on 6th October, 1955, and disembarked at Penang on 20th October, 1955. These units returned to Australia in 1957, disembarking at Sydney on 31st October. They were replaced by 3rd Battalion, The Royal Australian Regiment, (A) Field Battery, Royal Australian Artillery and other minor units.

(vii) *The Staff College.* Until 1938, the training of staff officers was carried out in the various Military Districts throughout Australia, except in cases where officers were selected from time to time to attend courses abroad. In 1938, an Australian Command and Staff School, located in the original Officers' Mess at Victoria Barracks, Sydney, was established. Between 1939 and 1945, the training of staff officers was carried out under varying conditions by different schools in accordance with the changing needs of the war.

Early in 1946, the Staff School (Australia) was established at Seymour in Victoria and re-designated the Staff College in conformity with other Empire training establishments for training officers for command and staff appointments. The College was later moved to Queenscliffe, Victoria, where it is at present situated. The courses are of ten months' duration and are held from January to November each year. The normal intake is 40 students and, on successfully completing the course, an officer is awarded the symbol "psc". The course is designed to train selected officers for war, and in so doing to fit them for Command or Grade II. staff appointments. Each course includes, among the students, Army representatives of the United Kingdom and other Dominions and countries. Included in the 1958 course are students from the United Kingdom, Canada, New Zealand, India, Pakistan, Thailand, the United States of America, the Philippines and Burma. Vacancies on each course are reserved also for officers who may be nominated by the Royal Australian Navy, the Royal Australian Air Force and the Commonwealth Public Service.

In order to ensure common standards in tactical doctrine and staff and command training throughout the Empire, liaison is maintained with other Staff Colleges; and to this end, there is also a reciprocal exchange of instructors. To this extent, it may be said that the Staff College is imperial in character.

(viii) *The Royal Military College.* The Royal Military College was established in 1911 at Duntroon in the Australian Capital Territory for the purpose of providing trained officers for the Army. The conditions of entry are laid down in the Royal Military College Regulations and provide for admission by "normal", "service", and "special" entries. The length of the "normal" course is four years; "service" entry cadets attend for three years; and "special" entries for one year.

While at the College, cadets receive pay and allowance of 16s. 2d. a day in their first year, rising to 26s. a day in their fourth. Uniform maintenance allowance of 2s. 6d. a day is additional, and a further 6d. a day is paid to cadets on attaining the age of 18 years. The course of instruction is organized into military and civil departments and the instructional staff comprises officers of the Army and civilian professors. On graduation, cadets are appointed lieutenants in the Australian Regular Army. The College also trains New Zealand cadets for commissions in the New Zealand Permanent Forces under an agreement made with the Government of that Dominion.

(ix) *The Officer Cadet School.* The Officer Cadet School was established in 1951 at Portsea, Victoria, for the purpose of speeding up the supply of junior regimental officers for the Australian Regular Army. Serving members of the Australian Regular Army, the Citizen Military Forces, National Servicemen, and civilians between the ages of 18 and 23 years, are eligible to apply for entrance. The course is of eleven months' duration and on graduation cadets are appointed second-lieutenants in the Australian Regular Army. They then normally proceed to further training at the Army School of the Arm or Service to which they have been allotted before being posted to regimental duties.

(x) *The Women's Royal Australian Army Corps School.* The W.R.A.A.C. School, established in 1952 at Mildura, Victoria, moved to Mosman, New South Wales in 1958. It has two wings, one whose primary task is the training of officer cadets for the W.R.A.A.C., the other being for the training of non-commissioned officers at all levels and for other special courses. The officer cadets are selected from eligible applicants, who may be serving members between 21 and 32 years of age, or civilians between 21 and 30 years of age. The course is of six months' duration and, on graduation, cadets are appointed lieutenants in the Women's Royal Australian Army Corps.

(xi) *The Army Apprentices' School.* The Army Apprentices' School was opened in 1948 at Balcombe, Victoria, with the aim of training youths as skilled tradesmen for the Australian Regular Army, and to form a background for an Army career with prospects of promotion. The course is open to boys between the ages of 15 and 17 years and provides training in a number of highly skilled trades. A three-year course of intensive theoretical and practical work at the Apprentices' School is followed by one year in an appropriate Army workshop or technical unit. At the end of their third year, boys are given their Army trade test and also take the Victorian Apprenticeship Commission final grade public examinations, which ensures that they will be accepted as qualified tradesmen

in civil life when they eventually leave the Army. In addition to trade training, the Apprentices' School provides general educational facilities up to the school leaving standard.

(xii) *Army Schools.* Schools have been established for the major Arms and Services for the purpose of training officers and other ranks in the up-to-date techniques of their own Arm or Service, to qualify them for promotion requirements, and to produce trained instructors. In addition, a School of Tactics and Administration which has been established at Seymour, Victoria, provides qualifying and instructional courses in current tactical and administrative doctrine for members of all Arms and Services. Courses at Army Schools are conducted for members of both the Australian Regular Army and the Citizen Military Forces.

The following Schools have been established:—School of Tactics and Administration; Jungle Training Centre; Armoured School; School of Artillery; School of Military Engineering; School of Survey; School of Signals; School of Military Intelligence; School of Infantry; Royal Australian Army Medical Corps School of Army Health; Royal Australian Army Service Corps School; Royal Australian Army Ordnance Corps School; Royal Australian Electrical and Mechanical Engineers Training Centre; Transportation Training Centre; School of Music; Women's Royal Australian Army Corps School; Air Support Unit (Joint Services) and School of Physical and Recreational Training.

(xiii) *Rifle Clubs.* The Australian Rifle Club movement, which had its origin in 1888, is provided for in the Defence Act and comprises an Australian Council of State Rifle Associations (which functions in an advisory capacity to the Minister and in the promotion of oversea and interstate rifle competitions), State Rifle Associations, District Rifle Club Unions and Rifle Clubs. When placed in recess in 1941, the efficient strength of the rifle club movement was 1,018 clubs and 36,478 members. Approximately 20 per cent. of this number served overseas and a further 60 per cent. performed home service duties during the 1939–45 War. Rifle shooting activities were resumed in 1946 and the strength of the movement as at 31st December, 1958, was 996 clubs and 43,751 members.

(xiv) *The Australian Battles Nomenclature Committee.* Reference is made to the formation of the Australian Battles Nomenclature Committee on 25th July, 1957, together with a broad outline of its functions and activities, in Official Year Book No. 43, page 1024. The Committee advised the United Kingdom Battles Nomenclature Committee regarding all operations of the 1939–45 War and the Korean Campaign in which Australian Military Forces participated. The final report of the United Kingdom Battles Nomenclature Committee was published in November, 1957.

(xv) *The Army Battle Honours Committee.* Following the publication of the final report of the United Kingdom Battles Nomenclature Committee, the Military Board, on 5th September, 1958, authorized the formation of an Army Head-quarters Battle Honours Committee with the following terms of reference:—

- (a) To examine and make recommendations to the Military Board on the following matters relating to the award of Battle Honours to A.M.F. units;
  - (i) The rules which should govern the award of Battle Honours to linked units.
  - (ii) Which units, if any, at present on the Order of Battle, may inherit (because of numerical or geographical associations) the Honours of A.M.F. units no longer on the Order of Battle.
  - (iii) Any other matters peculiar to the A.M.F. which the Committee considers should be decided.
- (b) To examine claims of A.M.F. units for Battle Honours for service in the 1939–45 War and Korean Operations and make recommendations to the Military Board.

Major-General Sir George F. Wootten, K.B.E., C.B., D.S.O., E.D., a distinguished soldier of both World Wars was appointed by the Military Board to be Chairman of the Committee.

**3. Strength of Australian Military Forces.**—The effective strength of the Australian Military Forces at 31st December, 1958, was as follows:—Australian Regular Army, 17,561; Regular Army Special Reserve, 3,778; Citizen Military Force (including National Service Trainees), 52,772; Australian Cadet Corps, 31,174.

**4. Design and Inspection Branch.**—The control of this Branch reverted to the Department of the Army from the Department of Supply as from 12th March, 1959.

#### § 4. Air Defence.

**1. General.**—A statement regarding the preliminary steps taken in connexion with the development of air defence appears in Official Year Book No. 18, page 610, and one on the expansion and development and zones and operations of the Royal Australian Air Force during the 1939–45 War in Official Year Book No. 36, page 1027.

**2. Administration and Organization.**—The Department of Air is responsible for policy for the organization and control of the Royal Australian Air Force. The Air Board is responsible, subject to approved policy, for the control and administration of the Royal Australian Air Force, and is constituted as follows:—Chief of the Air Staff, Air Member for Technical Services, Air Member for Personnel, Air Member for Supply and Equipment, Citizen Air Force Member and the Secretary, Department of Air.

Headquarters of the Royal Australian Air Force is in the process of moving from Melbourne to Canberra. An Oversea Headquarters is located at London and an Air Attaché at Washington.

The units of the Royal Australian Air Force are organized in three functional Commands throughout Australia and its Territories.

The Commands are:—

*Home Command.*—Home Command is responsible for the command of operational units and the conduct of their operations within Australia and its Territories.

*Training Command.*—Training Command is responsible for the command of training units, recruitment and individual training in the R.A.A.F.

*Maintenance Command.*—Maintenance Command is responsible for the command of supply and servicing units, and supply and servicing, including technical services, of the R.A.A.F. in Australia.

The organization of the Royal Australian Air Force includes the following types of formations and units:—

- (a) *Formations*, comprising a headquarters unit to control the activities of a number of units at one location. Each formation has a base squadron which provides common services to all units at the location.
- (b) *Flying Squadrons*. These bomber, fighter, transport and maritime reconnaissance squadrons undertake the operational and, in conjunction with operational conversion units, the operational training flying commitments of the R.A.A.F.
- (c) *Operational Conversion Units*. These units specialize in operational conversion training of aircrew for the bomber and fighter squadrons
- (d) *Aircraft Depots*. These units specialize in major overhauls, etc., of aircraft and equipment and relieve flying unit ground staff of these commitments.
- (e) *Stores Depots*. Stores and equipment ordered by the R.A.A.F. are delivered to these centrally located depots for distribution to units.
- (f) *Flying Training, Ground Training, Navigation, Radio and Air Armament Training Units*, which specialize in the aircrew and ground staff training required by the R.A.A.F.
- (g) *Airfield Construction Squadrons*. These units specialize in the construction of R.A.A.F. aerodromes and associated buildings and works services.
- (h) *Royal Australian Air Force College*. This unit is the training college for officer cadet entrants to the R.A.A.F.
- (i) *Telecommunications Units*. These units are responsible for the communications services of the R.A.A.F.
- (j) *R.A.A.F. Staff College*. This college trains specially selected R.A.A.F. officers for higher staff and command posts.

**3. Aircraft.**—Some of the aircraft which are at present being used in the Royal Australian Air Force are: bomber squadrons—Canberra; fighter squadrons—Mustang, Vampire, Meteor and Avon Sabre; transport squadrons—Metropolitan Hercules and Dakota; maritime reconnaissance squadrons—Lincoln and Neptune; air observation post—Auster and Cessna; training—Dakota, Canberra, Winjeel, Vampire, Meteor and Avon Sabre.

**4. Establishment.**—The Royal Australian Air Force establishment, as proposed, comprises an operational element and a support element consisting in all of approximately 17,000 personnel. The operational element consists of (a) Field Operational Force, (b) Operational Force, (c) Home Defence Force; the support element comprises the remainder of the R.A.A.F., and includes headquarters and administrative staffs and the organization for training, supply and maintenance.

**5. Strength of Royal Australian Air Force.**—At 1st March, 1959, the strength of the Royal Australian Air Force was as follows:—Permanent Air Force, 15,460; Active Citizen Air Force, 527; Active Reserve, 337 and General Reserve, 13,227.

**6. Women's Royal Australian Air Force.**—At 1st March, 1959, the Women's Royal Australian Air Force had an establishment of 836, with an enlisted strength of 778. There are 26 musterings, excluding members of the W.R.A.A.F. in training. Details of enlistment and service in the W.R.A.A.F. are given in Official Year Book No. 44, page 1058.

7. **Operations in Korea and Malaya.**—Reference to R.A.A.F. participation in operations in Korea is contained in Official Year Book No. 40, pages 1112–13.

Australian assistance in the form of one transport squadron provided to the Malayan authorities is detailed in Official Year Book No. 40, page 1113.

One bomber squadron was provided for operations in Malaya. No. 1 (Bomber) Squadron, equipped with Lincolns and operating from a Royal Air Force base on Singapore Island, served in this capacity from July, 1950, until withdrawn in July, 1958. During this period, the squadron dropped approximately 35 million lb. of bombs during operations against communist bandits.

Subsequent to the withdrawal of No. 1 (Bomber) Squadron, the R.A.A.F. component of the British Commonwealth Strategic Reserve was deployed to the R.A.A.F. base at Butterworth, Malaya. The force includes No. 2 (Bomber) Squadron, No. 3 (Fighter) Squadron and No. 77 (Fighter) Squadron. Deployment was completed in March, 1959.

### § 5. War Gratuities.

Reference is made in earlier issues of the Official Year Book to the payments made under the provisions of the War Gratuity Acts 1920 (*see* No. 15, p. 930) and the War Gratuity Act 1945–1947 (*see* No. 41, p. 999).

### § 6. Department of Supply.

1. **General.**—Reference to the creation of the Department of Supply is made in Official Year Book No. 39, page 1257. On 24th April, 1958, the Department of Defence Production was abolished and the functions previously undertaken by that Department were transferred to the Department of Supply. References to those functions and to the activities of the various branches and establishments of the former Department of Defence Production are made in Official Year Book No. 44, pages 1059–1061.

2. **Functions of the Department.**—The functions of the Department of Supply include:—

- (i) Defence research and development, including the operation of the Joint United Kingdom-Australia Long Range Weapons Project, and Australian research and development through the Weapons Research Establishment, the Aeronautical Research Laboratories, the Defence Standards Laboratories and associated establishments;
- (ii) Manufacture, acquisition, provision and supply of munitions (including aircraft) and miscellaneous goods and services required by the defence forces;
- (iii) Arrangement of contracts for the supply of goods and the performance of services;
- (iv) Operation and management of factories, workshops and undertakings concerned in the production of munitions (including aircraft), clothing, canvasware and other defence goods;
- (v) Acquisition, maintenance and disposal of strategic materials;
- (vi) Planning and establishment of manufacturing facilities for the production of munitions and other defence goods;
- (vii) Investigation and development of Australian sources of supply in connexion with defence;
- (viii) Sale or disposal of surplus Commonwealth property other than land or buildings;
- (ix) Provision of Commonwealth transport facilities outside the Australian Capital Territory;
- (x) Provision and control of stores required for or in connexion with matters administered by the Department of Supply, and general storage for other Departments as required;
- (xi) Provision of security services within the Department;
- (xii) Arrangements for ascertaining costs and the control and limitation of profits in connexion with the production of munitions and other defence goods.

3. **Act Administered.**—The Minister for Supply administers the Supply and Development Act 1939–1948, except insofar as it concerns the building, repair and maintenance of merchant ships and the building, extension, operation, repair and maintenance of ship-yards, drydocking and repair facilities for merchant ships.

4. **Research and Development Branch.**—(i) *General.* The Research and Development Branch, which is under the control of the Chief Scientist, is responsible for research and

scientific development in relation to war *matériel* including the operation of the joint United Kingdom—Australia Long Range Weapons Organization. The Chief Scientist is also the Chairman of the Board of Management for Research and Development, which is responsible for the efficient and economical conduct of research and development undertakings. The headquarters of the Branch is situated at 339 Swanston Street, Melbourne, and the following establishments are included in the Branch:—Weapons Research Establishment, Salisbury, South Australia; Defence Standards Laboratories, Maribyrnong, Victoria; Aeronautical Research Laboratories, Fishermen's Bend, Victoria.

(ii) *Weapons Research Establishment, Salisbury, South Australia.* This Establishment has two main sections, namely, the Trials and Instrumentation Wing and the Weapons Research and Development Wing.

The Trials and Instrumentation Wing is concerned with the Joint United Kingdom—Australia Long Range Weapons Project and is responsible for the testing of guided missiles developed in the United Kingdom. The Weapons Research and Development Wing is engaged chiefly on Australian-initiated research but also provides a supporting research service for the Joint Project.

The headquarters of Weapons Research Establishment consisting of the main laboratory, workshop and administrative services, is located at Salisbury.

Accommodation has been provided in the area for a number of United Kingdom firms which are developing guided weapons under contract to the British Ministry of Supply.

A modern airfield (Edinburgh Field) has been established adjacent to the Headquarters at Salisbury to meet the flying requirements of the establishment, the flying being carried out by the R.A.A.F.

Testing ranges have been provided at Woomera which is approximately 280 miles north-west of Salisbury and 9 miles north of Pimba, which is on the trans-continental railway line. A number of these testing ranges are now in operation. A modern township of 500 houses and extensive barracks accommodation has been built, complete with community store, hospital, school and all amenities usually found in an Australian country town.

(iii) *Defence Standards Laboratories.* The Defence Standards Laboratories at Maribyrnong continue to give comprehensive service to industry, the armed services, and other Commonwealth and State Departments.

The broad function of these laboratories is the application of scientific knowledge and research to the problems arising in design, development, manufacture, inspection, storage, and use of war *matériel*. Research is also carried out in connexion with the development of new and improved materials, methods and equipment of known or potential interest.

(iv) *Aeronautical Research Laboratories.*—The broad function of the Aeronautical Research Laboratories is the application of scientific knowledge in the field of aeronautics to the operational and technical problems of the armed services and industry, and to the development of new weapons and military equipment. More specifically, the Laboratories conduct investigations in aerodynamics, structures, materials, and power plants with particular attention to aeronautical defence problems, especially those of missile design and operational effectiveness. These Laboratories also collaborate with the United Kingdom on aeronautical research matters of mutual interest.

5. *Production.*—(i) *Munitions.* The Department is responsible for the production in Australia of the munitions (other than specialized Navy requirements) for the Armed Services. The production is undertaken both in government-operated factories and in industry. Broadly this production is allocated as follows:—

- (a) Some processes are undertaken entirely by the government factories in peace and war because of special requirements.
- (b) Some classes of equipment and components are produced entirely by industry in peace and war.
- (c) Production techniques of advanced equipment and components of which industry may undertake mass production in war, are developed in the government factories in peace.
- (d) Requirements of standard equipment and components produced by the government factories in limited quantities in peace are in war produced on a mass production basis in industry.

The following factories are currently in operation:—Ammunition—Footscray, Victoria; Explosives and Filling—Albion and Maribyrnong, Victoria; Mulwala and St. Mary's, New South Wales; Ordnance—Maribyrnong, Bendigo, Echuca, Port Melbourne, all in Victoria; Small Arms—Lithgow, New South Wales; Clothing, Victoria; and certain annexes established in industry. Other government-owned factories and annexes are held on a care and maintenance basis against an emergency.

These factories are complementary to each other in the manufacture of a range of basic munitions. The Ammunition Factory makes the brass and non-ferrous components of gun ammunition, including melting and rolling, and these components are then passed

to the Filling Factories for filling with explosives. In the case of small arms ammunition, however, the factory makes the complete round, receiving the propellant from the Explosives Factories. The Ordnance Factories principally make guns, but in addition make the steel shell bodies which are passed to the Filling Factories to be filled with explosives and assembled with the brass and other components received from the Ammunition Factory. The Bendigo factory is specially equipped to produce also main propulsion gearing for Naval destroyers and frigates; at Echuca ball-bearings are currently manufactured; and the Port Melbourne works is devoted to the production of marine engines. The Explosives Factories make the propellant and high explosives for the brass components made at the Ammunition Factory and the steel components made at the Ordnance Factory. The Explosives Factories also assemble the gun ammunition. The Small Arms Factory is equipped to make the rifles and other small arms for which the Ammunition Factory makes the ammunition. The factory is currently establishing production of the F.N. 7.62 m.m. automatic rifle for the Australian Army to replace the .303 Lee Enfield rifle.

Production of munitions is also a joint effort between the Government factories and private contractors in industry. In peace, industry produces many components for ammunition and other stores plus complete units such as electronic equipment and motor vehicles for the Services. In war, industry would provide the major capacity for mass production not only of these and many other new items, but also of equipment and components using engineering techniques developed in peacetime in the Government factories.

(ii) *Aircraft. (a) General.* The production in Australia of military types of aircraft and aero engines and of other aircraft components required by the Royal Australian Air Force and the Royal Australian Navy is also administered by the Department of Supply. Aircraft repair and overhaul activities carried out for those Services in civilian establishments, as distinct from Service workshops, are also the function of the Department, together with the responsibility of supplying aircraft and engine spare parts and airborne equipment generally.

(b) *Aircraft, Engine and Other Production.* The approved production programmes for the major aircraft manufacturing organizations in Australia comprised Canberra jet-engined bombers, Jindivik radio-controlled jet-propelled target aircraft and the Malkara guided missile at the Government Aircraft Factory, Melbourne; Avon Sabre jet-engined fighters, Winjeel basic trainers and Rolls-Royce Avon turbo-jet engines at Commonwealth Aircraft Corporation Pty. Ltd., Melbourne; and Vampire jet-trainers at De Havilland Aircraft Pty. Ltd., Sydney.

Production activities included the manufacture of parts of aero engines and of under-carriages at the Aircraft Engine Factory, Sydney, production of heavy forgings in light alloy materials at the Heavy Forge Annexe, Sydney, the manufacture of aircraft pressed metal parts at Chrysler Australia Ltd., Adelaide, and turbine and compressor blade production for jet engines by National Forge Pty. Ltd., Melbourne.

(c) *Repair and Overhaul.* During the year, the broad policy was continued by the R.A.A.F. of returning to the factories in which they were produced all Australian-made aircraft and aero engines requiring major overhaul and the incorporation of modifications. Repair and overhaul of R.A.A.F. aircraft of certain other types and of carrier-based aircraft operated by the R.A.N. were undertaken by civilian personnel in the aircraft factories or in the works of contractors specially equipped to handle this type of work.

Canberra bomber aircraft were repaired and modified at the Government Aircraft Factory, together with Jindivik target aircraft. Avon Sabre fighter aircraft were repaired and modified and Rolls-Royce Nene and Avon turbo-jet engines were overhauled by Commonwealth Aircraft Corporation Pty. Ltd., Melbourne. Rolls-Royce Merlin and Pratt and Whitney Twin Row Wasp engines from the R.A.A.F., Rolls-Royce Griffon, Bristol Centaurus and Armstrong-Siddeley Double Mamba turbo-propeller engines from the R.A.N., and Rover Meteor engines from the Department of the Army for Centurion tanks were overhauled at the Aircraft Engine Factory, Sydney. Wright turbo-compound engines from R.A.A.F. Neptune aircraft were overhauled by Qantas Empire Airways Ltd., Sydney.

Carrier-based Sea Venom aircraft, Vampire fighters and trainers, together with Ghost turbo-jet engines from Sea Venoms, Goblin turbo-jet engines from Vampire trainers and Gipsy Major piston engines were repaired and overhauled at De Havilland Aircraft Pty. Ltd. Dakota transport and other miscellaneous aircraft were reconditioned and serviced at the Government workshops at Parafield, South Australia.

The repair and overhaul of carrier-based Fairey "Firefly", Hawker "Sea Fury" and Fairey "Gannet" aircraft were handled by the Fairey Aviation Company of Australasia Ltd., Sydney.

Sycamore helicopter aircraft built by the Bristol Aeroplane Company, Bristol freighter aircraft, Alvis Leonides and Bristol Hercules engines from those aircraft were repaired and overhauled by Bristol Aviation Services, also in Sydney.

Repair and overhaul work on propellers was undertaken at the Propellor Annexe, Sydney, managed for the Commonwealth by De Havilland Aircraft Pty. Ltd., Sydney.

The reconditioning and servicing of aircraft instruments, electrical, electronic and other ancillary equipment and airframe components were carried out by various contractors.

(d) *Avalon Test Field.* During the year, the aircraft flight test field at Avalon, near Geelong (Victoria), was further developed for the final assembly, fitting out and testing in flight of the Canberra bomber, Avon Sabre fighter and Winjeel trainer aircraft, built, overhauled or modified at the aircraft factories near Melbourne.

6. **Contract Board.**—(i) *General.* Under the Supply and Development Act 1939–1948, the Contract Board is the authority responsible for purchasing supplies and arranging services for the Military, Naval and Air Forces of the Commonwealth, as well as for the Department of Supply. It is also responsible for the sale or disposal of all surplus or unserviceable war *matériel* and other goods approved for disposal. In addition the Board purchases and arranges disposals on behalf of other Commonwealth Government departments and authorities which have no public contract organization of their own, e.g., Immigration, National Development and External Affairs (Colombo Plan supplies).

(ii) *The Board and its Administrative Organization.* The Contract Board meets in Melbourne, and comprises representatives of the Departments of Supply, Navy, Army and Air. The Board's administrative organization is the Directorate of Contracts. In each State other than Victoria, there is a District Contract Board with an administrative organization similar to the Directorate of Contracts. The table following shows, in respect of the Contract Board Organization, the purchases and realizations from disposals for the years 1956–57 and 1957–58.

**CONTRACT BOARD ORGANIZATION : PURCHASES AND REALIZATIONS FROM DISPOSALS.**

(£.)

State.	Purchases.		Realizations from Disposals.	
	1956-57.	1957-58.	1956-57.	1957-58.
Contract Board, Victoria .. ..	31,853,447	18,358,263	1,242,289	1,619,495
District Contract Board—				
New South Wales .. ..	5,848,752	5,315,790	1,024,453	1,472,657
Queensland .. ..	1,206,103	1,006,079	480,722	420,508
South Australia .. ..	992,868	845,181	330,824	376,970
Western Australia .. ..	449,608	370,607	134,092	159,503
Tasmania .. ..	167,205	81,288	23,526	34,749
<b>Total .. ..</b>	<b>40,517,983</b>	<b>25,977,208</b>	<b>3,235,906</b>	<b>4,083,882</b>

7. **Defence Supply Planning.**—The central planning authority of the Department is the Planning Branch, the principal functions of which are:—

- (i) to plan for, and to assist in, the development of additional production capacity to meet the Services' munitions requirements for mobilisation and war;
- (ii) to provide and administer stockpiles of relevant materials and reserve pools of plant and equipment considered essential for expansion of production in the event of war;
- (iii) to prepare and progress co-ordinated production programmes against service orders and to analyse and interpret achievement against these programmes for the information of the Department and the Services.

The Production Planning Branch is the executive instrument of the Defence Supply Planning Committee which operates both as an advisory body and as a reviewing Committee on defence production matters for submission to the Higher Defence Machinery. Its

membership includes representatives of the three Services and the Departments of Defence, Supply and Trade, thereby ensuring a close liaison between the Departments most concerned with defence, both directly and indirectly, in the formation of defence supply planning policy.

A series of Industry Advisory Committees has been established to advise the Minister and the Department in the development of industrial mobilization plans to meet the Services *matériel* requirements for mobilization and war. The Committees are:—Ammunition; Electrical; Explosives and Chemicals; Machine Tools and Gauges and Munitions Factory Equipment; Materials; Military Vehicles; Radar and Telecommunications; Weapons and their Equipment; Hard Fibres; Raw Cotton; and Rubber and Allied Materials.

Members of the Committees include industrialists of wide experience and the highest ability in their chosen fields.

8. **Stores and Transport Branch.**—This Branch, administered by a Board of Management and working under the direction of a General Manager, functions as the central authority for meeting the storage and transport requirements of all Commonwealth departments. It is the authority for the arrangement of furniture removals, at departmental expense, in all States but not in the Australian Capital Territory or the Northern Territory. It has agents in Canberra and Darwin. It also operates a shipping and customs section and is responsible for the England-Australia Bulk Air Freight Scheme for Commonwealth Departments.

At 30th June, 1958, the Branch had under its control land, buildings, plant and machinery valued at £8,194,905 and 3,425,389 square feet of storage space, as well as storage facilities for large quantities of chemicals, bulk liquids and explosives.

9. **Finance Branch.**—The expenditure on Department of Supply activities during the year 1957–58 is shown in the following table.

**SUPPLY: TOTAL EXPENDITURE, 1957-58.**  
(£'000.)

Particulars.	Expenditure 1957-58.
<i>Supply</i> (Includes Department of Defence Production)	
Parliamentary Appropriations .. .. .	(a) 27,868
Trust Fund Accounts—	
Dorset Tin Dredge .. .. .	(b)
Mica .. .. .	(b)
Stores and Transport .. .. .	4,628
Government Factories and Establishments .. .. .	(c) 14,721
Munitions Production .. .. .	(d) 10,302
Munitions Materials .. .. .	(e)
Defence Production Materials .. .. .	43
Aircraft Production .. .. .	11,526
Strategic Stores and Equipment .. .. .	(e)
 <i>Total Trust Accounts</i> .. .. .	 41,220
 <b>Total Expenditure</b> .. .. .	 <b>69,088</b>

(a) Excludes audit charges and contributions under Superannuation Act.  
Department of National Development. (c) Includes Government

(b) Transferred to  
Clothing Factories.

(d) Previously designated Manufacture of Munitions. (e) Account closed.

## CHAPTER XXIX.

### REPATRIATION.

#### § 1. General.

The Repatriation Commission, established under the Repatriation Act 1920-1958, is a body corporate consisting of three full-time members. It operates from Melbourne, but has a branch office in each State under the control of a Deputy Commissioner.

Its principal functions are—

- (i) the payment of war and service pensions to ex-service men and women and their dependants;
- (ii) the provision of medical treatment to ex-service men and women for injuries and illnesses caused or aggravated by their war service;
- (iii) the provision of medical treatment in certain circumstances to ex-service men and women, and to their dependants, who are suffering from injuries and illnesses not caused or aggravated by war service.

Other functions of the Repatriation Commission are outlined in a later section of this chapter (*see* § 5, General Benefits, page 1079).

During the year 1957-58, the Repatriation Act was amended by the Repatriation Act (No. 47) 1958 which increased certain rates of war pension and provided for Supplementary Assistance for Service Pensioners in receipt of the maximum rate of service pension who pay rent and are entirely dependent upon the service pension.

The Repatriation (Far East Strategic Reserve) Act 1956, which provided benefits for members of the defence forces who served with the British Commonwealth Far East Strategic Reserve in Malaya, came into force on 1st September, 1957.

#### § 2. War Pensions.

1. **General.**—The first provision for the payment of war pensions to members of the forces and their dependants was made by the Commonwealth Parliament in the War Pensions Act 1914, which came into operation on 21st December, 1914. This Act was repealed in 1920 by the Australian Soldiers' Repatriation Act (amended from 31st December, 1950, to the Repatriation Act). Owing to limitations of space, only some of the main features relating to war pensions under the Repatriation Act 1920-1958 are set out in the following paragraphs:—

(i) *Eligibility for Pension.* The 1943 amendments to the Repatriation Act considerably widened the provisions in this respect, to the benefit, mainly, of members of the Citizen Military Forces who have not served outside Australia. These provisions are summarized as follows:—

- (a) A member of the forces who served (1) outside Australia, (2) in the Territories of Australia, such as Papua and New Guinea, or (3) within Australia in

circumstances which can be regarded as combat against the enemy, is covered for war pension purposes in respect of incapacity or death which may result from any occurrence that happened during the period from the date of his enlistment to the date of the termination of his service in respect of that enlistment.

(b) In other cases where a member served only in Australia, incapacity or death to be pensionable must have been attributable to service.

(c) There is a third ground applicable to all in (a) and those in (b) who have had at least six months' camp service. This provides that, where a condition existed at enlistment, a pension may accrue if it is considered that the condition was aggravated by service.

(ii) *Pensions for Incapacity.* From 20th October, 1955, the 100 per cent. pension rate for a member's incapacity was increased from £4 10s. to £4 15s. a week (higher rates were payable in respect of certain commissioned ranks). The rates for wives and children of incapacitated members are £1 15s. 6d. and 13s. 9d. a week, respectively. From 17th October, 1957, the member's 100 per cent. incapacity rate was increased from £4 15s. to £5 2s. 6d. a week.

(iii) *Supplementation of Pensions.* From 2nd October, 1958, where a member is, because of his war disability, temporarily (for at least three months) precluded from earning other than a negligible percentage of a living wage an additional pension may be granted to bring the total pension to the member up to £11 10s. a week.

(iv) *Women's Nursing and Auxiliary Services.* Members of Women's Services are eligible for pensions and other benefits as prescribed in the Act on the same basis as male members of the Forces.

(v) *Pulmonary Tuberculosis.* If at any time after discharge, a member of the Forces who served in a theatre of war became or becomes incapacitated, or died or dies, from pulmonary tuberculosis, war pension is payable as if the incapacity or death resulted from an occurrence on service. (See also § 3. Service Pensions.) Medical treatment may also be provided on application.

(vi) *Special Rates.* Those who have been totally blinded as a result of war service and those who are permanently and totally incapacitated received, as from the 17th October, 1957, special pensions of £11 a week. The rate for Tuberculars, Class "B" (fit for light employment) was £7 17s. 6d. a week. The rates were further increased to £11 10s. and £8 2s. 6d. a week respectively from 2nd October, 1958. In addition to the special pension, an attendant's allowance of £1 15s. a week is granted to the war-blinded and to certain others who are deemed to be in need of an attendant. A war-blinded member who is also affected with total loss of speech or total deafness was entitled from 2nd October, 1952, to an attendant's allowance of £3 10s. a week in lieu of that referred to above. Attendant's allowance rates were further increased from 20th October, 1955, to £2 15s. and to £4 10s. a week, respectively. The wife and any children under 16 years of age receive the same rates as shown in sub-para.(ii).

(vii) *Specified Disabilities.* Where the disability is amputation of a limb or limbs or total loss of vision in one eye, amounts ranging from 8s. 6d. to £6 7s. 6d. a week in addition to the statutory rate of pension are payable as from 2nd October, 1958. In addition, allowances of either £2 15s. or £4 10s. a week are payable in certain double amputation cases.

(viii) *Time Limit Removed for Wives and Children.* Prior to the 1950 amending Act, wives who were married and children who were born after 1st July, 1938, were ineligible to receive a war pension. This time limit was removed as from 2nd November, 1950.

(ix) *Rates of Pension for Death.* (a) *Widows.* As already indicated, rates of pension, which were previously based on the daily rate of pay of the member, are now based on the rank of the member. From 17th October, 1957, the rates were increased by 7s. 6d. a week, the minimum rate being increased from £4 10s. to £4 17s. 6d. a week. In addition to the pension, the widow, if she has dependent children, receives an allowance if she is permanently unemployable, or if she is over 50 years of age; this allowance was increased from £2 a week to £2 7s. 6d. a week as from 2nd October, 1958. The allowance may also be paid to a widow under 50 years of age, in certain cases, so long as the child (or one of the children if more than one child) over the age of sixteen, is undergoing education or training but has not qualified for (or is not receiving) the adult wage in the occupation for which the child is training.

(b) *Children.* From 2nd October, 1958, the rate of pension for the eldest child (under 16 years of age) was increased from £1 6s. 6d. a week to £1 11s. 6d. a week, and that for each younger child from 18s. 6d. a week to £1 2s. 6d. a week. Additional pension of 6s. a week may be paid in certain circumstances. Where both parents are dead, pension payable to each child was increased from £2 8s. a week to £3 3s. a week.

(x) *Widowed Mother on Death of Member.* A pension ranging from £2 5s. to £4 3s. a week, according to the rank of the member, may be granted to a widowed mother of a deceased unmarried son, provided widowhood occurred either prior to or within three years after the death of the member. The pension may be supplemented by payment to a prescribed person of an additional amount (not exceeding £4 7s. 6d. a week as from the 17th October, 1957) according to the extent of other income of the pensioner. The value of property owned does not affect the pension.

2. *Appeals Tribunals.*—The principal Act was amended, as from 1st June, 1929, to create tribunals to hear appeals in respect of war pensions. The War Pensions Entitlement Appeal Tribunal is empowered to hear and decide any appeal by or on behalf of ex-members of the Forces or their dependants against a decision of the Repatriation Commission that the incapacity or death of an ex-member did not arise out of war service. Assessment Appeal Tribunals were created to hear and decide any appeal against a current assessment or a "Nil" assessment of war pension made by the Repatriation Commission in respect of the incapacity of an ex-member of the Forces which had been accepted as arising out of war service. Provision was made by subsequent legislation to enable the Tribunals to hear appeals by certain members whose application for a service pension has been refused.

3. *Summary of War Pensions, 1957-58.*—At 30th June, 1958, the number of war pensions for the 1914-18 War was 130,605, for the 1939-45 War 493,631, and for the Korea and Malaya Operations 4,126, making a total of 628,362 with a liability of £49,313,447 per annum. The amount paid in war pensions during the year 1957-58 was £50,278,197. The outstanding features for 1957-58 for each war are listed in the following table:—

WAR PENSIONS : SUMMARY, AUSTRALIA, 1957-58.

Particulars.	1914-18 War.	1939-45 War.	Korea and Malaya Operations.	Total.
New claims granted .. .. .	2,353	29,007	820	32,180
Restorations .. .. .	426	1,134	6	1,566
Claims rejected (gross) .. .. .	2,368	18,165	989	21,522
Pensions reviewed .. .. .	7,722	44,463	291	52,476
Pensions cancelled or discontinued .. .. .	777	9,831	60	10,668
Deaths of pensioners .. .. .	4,238	2,339	18	6,595
Number of pensions in force at 30th June, 1958 .. .. .	130,605	493,631	4,126	628,362
Annual pension liability at 30th June, 1958 £	20,739,134	28,339,013	235,300	49,313,447
Amount paid in pensions during the year 1957-58 .. .. . £	(a)	(a)	(a)	50,278,197

(a) Not available.

4. *Classes of War Pensions, Australia, 1957-58.*—(a) *New Claims Granted.* The following is an analysis of the total number of new claims granted during 1957-58:—

**WAR PENSIONS : NEW CLAIMS GRANTED, AUSTRALIA, 1957-58.**

Class.	1914-18 War.	1939-45 War.	Korea and Malaya Operations.	Total.
Members .. .. .	842	5,659	223	6,724
Wives of Members .. .. .	1,116	6,033	183	7,332
Children .. .. .	265	16,695	395	17,355
Other dependants .. .. .	130	620	19	769
<b>Total .. .. .</b>	<b>2,353</b>	<b>29,007</b>	<b>820</b>	<b>32,180</b>

(b) *Pensions in Force.* The following table shows the number of pensions in force at 30th June, 1958, for each war and for each class of pensioner:—

**WAR PENSIONS IN FORCE, AUSTRALIA, 30th JUNE, 1958.**

Class.	Number of Pensioners at 30th June, 1958.			
	1914-18 War.	1939-45 War.	Korea and Malaya Operations.	Total.
Children of deceased members .. .. .	453	7,132	99	7,684
Orphans .. .. .	39	109	..	148
War widows .. .. .	20,163	11,534	59	31,756
Members .. .. .	55,814	147,147	1,478	204,439
Children .. .. .	3,234	198,600	1,464	203,298
Wives .. .. .	49,146	121,991	941	172,078
Parents .. .. .	1,456	6,892	79	8,427
Brothers and sisters .. .. .	72	104	5	181
Others .. .. .	228	122	1	351
<b>Total .. .. .</b>	<b>130,605</b>	<b>493,631</b>	<b>4,126</b>	<b>628,362</b>

(c) *Special Rate Pensions.* At 30th June, 1958, special rate pensions of £11 a week were being paid to the following classes of members of the Forces:—

**WAR PENSIONS: MEMBERS ON SPECIAL RATES, AUSTRALIA, 30th JUNE, 1958.**

Class.	1914-18 War.	1939-45 War.	Korea and Malaya Operations.	Total.
Blinded members .. .. .	233	214	4	451
Tubercular members .. .. .	657	757	8	1,422
Totally and permanently incapacitated members .. .. .	11,235	4,480	17	15,732
Tuberculars, Class " B " (a) .. .. .	135	324	1	460

(a) Rate £7 17s. 6d. a week.

5. *Number of War Pensioners and Annual Liability, States, etc., 30th June, 1958.*—The following table shows the number of pensions in force and annual liability for each war at 30th June, 1958, according to place of payment: (The amount paid is shown on p. 1076.)

## WAR PENSIONS : NUMBER OF PENSIONERS AND ANNUAL LIABILITY, 30th JUNE, 1958.

Where Paid.	Number of War Pensions in Force at 30th June, 1958.				Annual Pension Liability. (£.)
	Incapacitated Members of the Forces.	Dependants of Incapacitated Members.	Dependants of Deceased Members.	Total.	
1914-18 WAR.					
New South Wales(a) .. ..	17,866	16,843	7,465	42,174	6,743,864
Victoria .. ..	18,792	17,261	7,421	43,474	6,852,242
Queensland .. ..	6,820	6,302	2,023	15,145	2,597,426
South Australia(b) .. ..	4,254	4,200	1,750	10,204	1,701,441
Western Australia .. ..	4,487	4,522	1,596	10,605	1,420,899
Tasmania .. ..	2,446	2,450	862	5,758	983,330
<i>Australia</i> .. ..	<i>54,665</i>	<i>51,578</i>	<i>21,117</i>	<i>127,360</i>	<i>20,299,202</i>
Overseas .. ..	1,149	1,228	868	3,245	439,932
<b>Total</b> .. ..	<b>55,814</b>	<b>52,806</b>	<b>21,985</b>	<b>130,605</b>	<b>20,739,134</b>
1939-45 WAR.					
New South Wales(a) .. ..	51,190	104,693	9,631	165,514	9,638,434
Victoria .. ..	40,273	88,350	6,764	135,387	7,708,042
Queensland .. ..	20,085	46,578	3,214	69,877	4,230,131
South Australia(b) .. ..	15,784	37,257	2,464	55,505	3,006,708
Western Australia .. ..	13,465	28,667	2,158	44,290	2,431,716
Tasmania .. ..	5,814	14,797	690	21,301	1,173,950
<i>Australia</i> .. ..	<i>146,611</i>	<i>320,342</i>	<i>24,921</i>	<i>491,874</i>	<i>28,188,981</i>
Overseas .. ..	536	873	348	1,757	150,032
<b>Total</b> .. ..	<b>147,147</b>	<b>321,215</b>	<b>25,269</b>	<b>493,631</b>	<b>28,339,013</b>
KOREA AND MALAYA OPERATIONS.					
New South Wales(a) .. ..	552	869	98	1,519	84,663
Victoria .. ..	365	550	61	976	54,950
Queensland .. ..	253	434	29	716	43,342
South Australia(b) .. ..	100	201	10	311	17,938
Western Australia .. ..	124	217	15	356	20,260
Tasmania .. ..	58	113	8	179	8,468
<i>Australia</i> .. ..	<i>1,452</i>	<i>2,384</i>	<i>221</i>	<i>4,057</i>	<i>229,621</i>
Overseas .. ..	26	24	19	69	5,679
<b>Total</b> .. ..	<b>1,478</b>	<b>2,408</b>	<b>240</b>	<b>4,126</b>	<b>235,300</b>

(a) Includes the Australian Capital Territory.

(b) Includes the Northern Territory.

6. Summary of War Pensions.—(i) *Number.* The following table shows, for each year and in total, the number of pensions granted, claims rejected, pensions in force, and the annual liability for pensions in each of the years ended 30th June, 1954 to 1958.

**WAR PENSIONS : SUMMARY, AUSTRALIA.**

Year ended 30th June—	Pensions Granted.	Claims Rejected.	Number of War Pensions in Force at 30th June.				Annual Pension Liability at 30th June. (£.)
			Incapacitated Members of the Forces.	Depend- ants of Incapacitated Members.	Depend- ants of Deceased Members.	Total.	
<b>1914-18 WAR.</b>							
1954 .. ..	3,063	1,559	61,634	58,390	20,980	141,004	16,574,412
1955 .. ..	2,758	2,031	60,398	57,045	21,198	138,641	17,673,142
1956 .. ..	2,337	1,488	58,984	55,720	21,409	136,113	18,939,411
1957 .. ..	2,276	2,442	57,380	54,183	21,677	133,240	19,074,146
1958 .. ..	2,353	2,368	55,814	52,806	21,985	130,605	20,739,134
<b>1939-45 WAR.</b>							
1954 .. ..	33,370	13,733	129,926	265,552	25,773	421,251	20,211,273
1955 .. ..	33,748	18,380	134,979	282,367	25,516	442,862	22,424,840
1956 .. ..	30,098	13,756	139,249	296,214	25,391	460,854	24,548,421
1957 .. ..	28,634	19,682	143,055	308,333	25,287	476,675	25,609,726
1958 .. ..	29,007	18,165	147,147	321,215	25,269	493,631	28,339,013
<b>KOREA AND MALAYA OPERATIONS.</b>							
1954 .. ..	698	450	643	572	196	1,411	92,652
1955 .. ..	642	507	878	949	207	2,034	125,738
1956 .. ..	676	305	1,057	1,382	208	2,647	157,155
1957 .. ..	782	616	1,279	1,881	215	3,375	188,864
1958 .. ..	820	989	1,478	2,408	240	4,126	235,300
<b>TOTAL.</b>							
1954 .. ..	37,131	15,742	192,203	324,514	46,949	563,666	36,878,337
1955 .. ..	37,148	20,918	196,255	340,361	46,921	583,537	40,223,720
1956 .. ..	33,111	15,549	199,290	353,316	47,008	599,614	43,644,987
1957 .. ..	31,692	22,740	201,714	364,397	47,179	613,290	44,872,736
1958 .. ..	32,180	21,522	204,439	376,429	47,494	628,362	49,313,447

(ii) *Amount Paid and Place of Payment.* The following table shows for the years 1953-54 to 1957-58 the amounts paid in pensions and the place where they were paid:—

**WAR PENSIONS : AMOUNT PAID.**

(£.)

Place of Payment.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
New South Wales(a) .. ..	12,578,067	14,100,305	14,501,426	15,297,734	16,824,229
Victoria .. ..	10,600,721	11,975,025	12,718,047	13,372,248	14,871,179
Queensland .. ..	4,591,219	5,385,216	5,763,319	6,106,669	6,919,363
South Australia(b) .. ..	3,583,510	4,101,624	4,135,874	4,309,036	4,812,417
Western Australia .. ..	3,086,783	3,438,517	3,450,830	3,584,495	4,008,412
Tasmania .. ..	1,820,440	1,933,349	2,017,289	2,026,868	2,211,862
Overseas .. ..	536,304	514,575	578,892	506,737	630,735
<b>Total .. ..</b>	<b>36,797,044</b>	<b>41,448,611</b>	<b>43,165,677</b>	<b>45,203,787</b>	<b>50,278,197</b>

(a) Includes the Australian Capital Territory

(b) Includes the Northern Territory.

### § 3. Service Pensions.

1. **General.**—The Repatriation Act 1920–1958, administered by the Repatriation Department, provides for a service pension to be paid, subject to a means test of income and property, to:—

- (i) A male member of the Forces who is sixty years of age and who served in a theatre of war, or to a female member of the Forces who is 55 years of age and who served abroad. No pension is payable to the wife or children under 16 years of age of a member granted a service pension on account of age.
- (ii) A member of the Forces who is permanently unemployable and who served in a theatre of war (or, in the case of a female member, who served abroad). Service pensions are also payable to a pensioner's wife and up to four children under 16 years of age.
- (iii) A member of the Forces suffering incapacity from pulmonary tuberculosis whether or not the person served in a theatre of war. Service pensions are also payable to a pensioner's wife and up to four children under 16 years of age.

Only those persons who qualify under (iii) are entitled to receive both service and invalid pensions at the same time.

2. **Rate of Pension.**—The maximum rate of service pension is the same as that for age and invalid pensions paid by the Department of Social Services, namely, £4 7s. 6d. a week. Since the 18th October, 1956, a member service pensioner with two or more children under 16 years of age in his care, custody and control, is eligible for a further 10s. a week for each child except the first, if he receives a service pension on the ground of being permanently unemployable, or suffering from pulmonary tuberculosis. As from 16th October, 1958, a service pensioner in receipt of service pension at the maximum rate may also receive Supplementary Assistance of 10s. a week if he pays rent and is entirely dependent upon his service pension.

The maximum rate for a member's wife is £1 15s. a week; the rate for the first child under sixteen years of age is 11s. 6d. a week and for each other child (not exceeding three) 2s. 6d. a week.

A member who is single may have income up to £3 10s. a week from sources other than his pension and still receive the maximum service pension. If income from other sources exceeds £3 10s. a week, the pension is reduced by the amount of the excess. No service pension is payable if income from other sources reaches or exceeds £7 17s. 6d. a week. For this purpose, the term "income" includes a war pension, and income derived from any source other than from property, but does not include a gift or allowance from a claimant's parents, children, brothers or sisters, maternity allowance, child endowment or other payments in respect of children, a benefit from any friendly society, a payment in respect of illness, infirmity or old age from any trade union, the value of State food relief or like assistance granted under any law of a State or Territory, Commonwealth hospital and medical benefits (including an amount received from a registered benefit organization up to the total amount of fees), pharmaceutical benefits or a tuberculosis allowance, or interest on Commonwealth war gratuities.

The rate of pension is further reduced by 4½d. a week for every complete £10 by which the value of property owned by a member exceeds £200. No pension is payable if the value of the property exceeds £2,250. For this purpose, the term "property" includes all real and personal property such as houses or land or interests therein, money in a bank or invested, or lent to any person, bonds, shares, interests in estates of deceased persons, and livestock, but excludes the value of the home of the pensioner and of his furniture and personal effects, the surrender value (up to £750) of any life assurance policies, the capital value of any life interest, annuity or contingent interest, the value of any reversionary interest, property to which the claimant or spouse is entitled from the estate of a deceased person but which has not been received, and the amount of any Commonwealth war gratuity.

For the purposes of the administration of the means test, the income and property of a married person are deemed to be half the total income and property of the husband and wife (unless they are legally separated or in certain other special circumstances). This

provision means that the pension of a married person, whether or not his spouse is a pensioner, will not be reduced because of the income he receives from sources other than his pension unless that income exceeds £7 17s. 6d. a week, nor will his pension be reduced on account of the value of his property unless that value exceeds £400.

Eligibility for service pensions was extended on 1st November, 1941 to veterans of the South African War 1899–1902 and in 1943 to members of the Forces of the 1939–45 War. Members who served in Korea are also eligible as are those who served in Malaya prior to the commencement of the Repatriation (Far East Strategic Reserve) Act 1956.

3. Operations, 1957-58.—The following table gives a summary relating to service pensions during 1957-58:—

<i>Claims granted during year—</i>						
Members of the Forces	..	..	..	..	..	5,071
Wives ..	..	..	..	..	..	1,926
Children	..	..	..	..	..	1,017
<i>Total</i>	..	..	..	..	..	<u>8,014</u>
<i>Claims rejected during year—</i>						
Members of the Forces	..	..	..	..	..	1,080
Wives ..	..	..	..	..	..	586
Children	..	..	..	..	..	409
<i>Total</i>	..	..	..	..	..	<u>2,075</u>
Service pensions cancelled or discontinued during year	..					3,610
Deaths of pensioners during year	..	..	..	..	..	1,916
Pensions in force at 30th June, 1958	..	..	..	..	..	42,203
Annual pension liability on 30th June, 1958	..	..	..	..	..	£5,998,648

4. Number of Service Pensioners and Amount Paid.—(i) *Summary, Australia.* The following table shows the number of service pensions in force and the amount paid in pensions for the five years 1953-54 to 1957-58.

**SERVICE PENSIONS : SUMMARY, AUSTRALIA.**

Year.	Number of Service Pensions at 30th June payable to—					Total.	Amount Paid in Pensions during year ended 30th June.
	Aged Members of Forces.	Members of the Forces who are—		Dependants of Members where the Member is—			
		Permanently Unemployable.	Suffering from Pulmonary Tuberculosis.	Permanently Unemployable.	Suffering from Pulmonary Tuberculosis.		
1953-54 .. ..	9,648	5,294	321	5,092	451	20,806	£ 2,694,522
1954-55 .. ..	10,566	5,555	379	5,286	530	22,316	3,011,861
1955-56 .. ..	11,881	9,733	1,266	10,001	1,894	34,775	4,140,488
1956-57 .. ..	13,547	10,794	1,449	11,074	2,213	39,077	4,907,362
1957-58 .. ..	15,365	11,472	1,477	11,667	2,222	42,203	5,629,748

(ii) *Amount Paid and State where Paid.* The following table shows for the years 1953-54 to 1957-58 the amount paid in pensions and the State where paid:—

**SERVICE PENSIONS : AMOUNT PAID.**  
(£.)

State where Paid.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
New South Wales(a) .. ..	977,815	1,050,593	1,472,949	1,727,099	1,899,624
Victoria .. ..	601,579	684,636	958,825	1,089,529	1,319,599
Queensland .. ..	467,038	528,571	679,181	845,828	945,654
South Australia(b) .. ..	259,438	287,624	401,159	477,229	520,481
Western Australia .. ..	302,617	361,294	482,021	547,473	697,531
Tasmania .. ..	86,035	99,143	146,353	220,204	246,859
<b>Australia .. ..</b>	<b>2,694,522</b>	<b>3,011,861</b>	<b>4,140,488</b>	<b>4,907,362</b>	<b>5,629,748</b>

(a) Includes the Australian Capital Territory.

(b) Includes the Northern Territory.

#### § 4. Medical Treatment of Ex-Servicemen Suffering from War Service Disabilities.

At 30th June, 1958, there were 4,498 in-patients in Repatriation medical institutions and State mental hospitals, including a number whose care was undertaken by the Repatriation Commission on behalf of other countries or Commonwealth departments. There were 397,610 out-patient attendances for treatment during the year, excluding approximately 961,242 treatments by local medical officers resident in metropolitan and country areas and in New Guinea. The expenditure for the year ended 30th June, 1958, was £10,979,925.

#### § 5. General Benefits and Miscellaneous.

1. *Other Departmental Activities.*—(i) *General.* During the 1939-45 War, the ordinary activities of the Department in the way of general benefits for the welfare of members and dependants were carried on without interruption. They were mainly education and training of children under the Soldiers' Children Education Scheme, medical benefits for widows and children of deceased members and for widowed mothers of deceased unmarried members, funeral expenses for certain classes of members and dependants, and allowances to certain classes of dependants.

By legislation passed in June, 1940, these benefits were extended to members engaged in the 1939-45 War and in November, 1950, to those engaged in the Korea and Malaya Operations, and new benefits designed for the re-establishment of members after discharge from the Forces were made available. The re-establishment benefits administered by the Repatriation Commission are:—payment of re-employment allowance while awaiting employment; provision of tools of trade and equipment where such are necessary to the member's employment; transportation expenses to meet the cost of fares and removal of household belongings, where a member takes up training, employment, or a business, or settles on the land; supplementing of wages of apprentices whose apprenticeships were interrupted by war service; re-establishment loans to enable members and widows to establish themselves in business, practices or other occupations, including (until the Division of War Service Land Settlement began operations early in 1946) agricultural occupations; payment of re-establishment allowance during the early stages of establishment in business; gifts up to £75 for furniture to members who are blind or totally and permanently incapacitated, also to widows with children under 16 years of age; and free passages to Australia for wives, widows and children of members who married abroad (and passages outward from Australia in certain cases of members and dependants).

In 1949, the Commission took over the functions of the Re-establishment Division of the former Department of Post-war Reconstruction, and it is now responsible for the co-ordination of all matters relating to training under the Commonwealth Reconstruction Training Scheme. Re-establishment of the more seriously disabled, where ordinary training is not sufficient, continues to be a function of the Commission, and special means have to be found to overcome each problem.

(ii) *General Repatriation Benefits.* The following table gives a summary of expenditure during 1957-58 on the more important general repatriation benefits for all wars.

**GENERAL REPATRIATION BENEFITS, 1956-57.**

Benefit.	Expenditure, 1957-58.	
	£	£
<i>Medical Treatment of Members—</i>		
Operation of Institutions .. .. .	6,362,402	
Dispensing of Prescriptions .. .. .	1,421,729	
Fees to Consultants, etc. .. .. .	977,889	
Maintenance of Patients in other than Repatriation Institutions	679,635	
Sustenance Allowance .. .. .	646,018	
Other Treatment (Surgical Aids, Dental Treatment, etc.) .. .. .	402,773	
		10,490,446
<i>Medical Treatment of Dependants</i> .. .. .	..	489,479
<i>Employment and Vocational Training—</i>		
Re-employment Allowance .. .. .	10	
Tools of Trade (gift) .. .. .	4,811	
Tools of Trade (loan) .. .. .	2,168	
Members in Training (a) .. .. .	330,175	
Fares and Removal Expenses .. .. .	2,840	
		340,004
<i>Business Loans</i> .. .. .	..	56,267
<i>Furniture Grants—</i>		
Widows .. .. .	225	
Members .. .. .	..	
		225
<i>Soldiers' Children Education Scheme</i> .. .. .	..	593,097
<i>Living Allowances</i> .. .. .	..	2,906,870
<i>Other Benefits</i> .. .. .	..	228,136
<b>Total</b> .. .. .	..	<b>15,104,524</b>

(a) Expenditure by the Department of Labour and National Service and the Universities Commission.

The following table gives a summary of expenditure during the five years 1953-54 to 1957-58 on the more important general repatriation benefits for all wars.

**EXPENDITURE ON GENERAL REPATRIATION BENEFITS, SUMMARY  
1953-54 TO 1957-58.**

(£.)

Year ended 30th June.	Medical Treatment.	Employment and Vocational Training.	Business Loans and Furniture.	Living Allowances.	Soldiers' Children Education Scheme.	Other Benefits.	Total.
1954 ..	8,906,189	505,944	227,679	2,128,052	340,496	223,781	12,332,141
1955 ..	8,969,116	313,242	178,060	2,334,047	368,876	229,591	12,392,932
1956 ..	9,559,880	221,711	145,453	2,357,660	348,282	206,615	12,839,601
1957 ..	10,288,344	253,665	91,380	2,447,443	427,546	234,797	13,743,175
1958 ..	10,979,925	340,004	56,492	2,906,870	593,097	228,136	15,104,524

2. **Expenditure by the Repatriation Commission, 1957-58.**—The total expenditure by the Repatriation Commission for the year ended 30th June, 1958, was £75,032,815, distributed as follows:—

<i>Repatriation Benefits—</i>	£	£
War and Service Pensions .. .. .	58,889,295	
Operation of Medical Institutions, Medical Treatment, etc. .. .. .	11,274,382	
Soldiers' Children Education Scheme .. .. .	593,097	
	<hr/>	70,756,774
<i>Other Benefits—Seamen's War Pensions, etc.</i> .. .. .	..	137,126
<i>Administration</i> .. .. .	..	3,221,043
<i>Capital Works and Services</i> .. .. .	..	917,872
<b>Total</b> .. .. .	..	<u>75,032,815</u>

3. **Settlement of Returned Service Personnel on the Land.**—Reference to the settlement of returned service personnel on the land will be found in Chapter IV.—Land Tenure and Settlement.

4. **The Services Canteens Trust Fund.**—(i) *Introduction.* The Services Canteens Trust Fund was established under the Services Trust Funds Act 1947. This Act transferred to the Fund the profits and assets of the Army, Navy and Air Force canteens, the mess and regimental funds of disbanded wartime units, money derived from the sale of amenities supplied to the defence forces between 3rd September, 1939, and 30th June 1947, and funds held by the A.M.F. Special Benefits Committee, the trustees of the R.A.N. Relief Fund and the trustees of the R.A.A.F. Welfare Fund.

(ii) *Establishment and Administration of the Fund.* The total amount transferred to the Fund to 31st December, 1958, was £5,526,281. The Act prescribed that of this, £2,500,000, and such further amounts as the trustees of the Fund may from time to time decide, should be devoted to the provision of education facilities for the children of eligible ex-servicemen and women, and that the balance of the fund should be used to provide relief for ex-servicemen and women and their dependants in necessitous circumstances.

The Fund is administered by ten honorary trustees, appointed by the Commonwealth Government. The trustees have power to determine the persons or groups of persons to benefit from the Fund and the extent of benefits to be granted within the provisions of the Act, and to appoint regional committees to assist with the administration.

Regional committees have been established in all Australian States, the Australian Capital Territory, the Northern Territory, New Zealand and London. All Australian diplomatic and consular posts also act as local representatives of the trustees. They have delegated to them by the trustees specific powers to deal with applications for assistance from the Fund.

Members of regional committees are all persons who served in the 1939-45 War or are widows of men who served during the war, and, with the exception of regional chairmen and deputy chairmen, have been selected by the trustees from nominees of the major ex-service organizations. They also serve in an honorary capacity.

(iii) *Assistance from the Fund.* Persons eligible for assistance from the Fund are those who between 30th September, 1939, and 30th June, 1947, served in the Australian Naval, Military or Air Forces, including members of the Canteens Staff of any ship of the Royal Australian Navy, persons duly accredited to any part of the Defence Force who served in an official capacity on full-time paid duty, and their dependants.

The trustees are charged under the Services Trust Funds Act with:—

(a) providing educational assistance including professional and trade training—

(i) for the children of deceased or incapacitated eligible servicemen or of eligible servicemen who are in needy circumstances; and

(ii) for the children of other eligible servicemen, which children are in the opinion of the trustees particularly deserving of assistance by reason of exceptional circumstances;

(b) providing benefits for—

- (i) eligible servicemen in necessitous or deserving circumstances;
- (ii) the dependants of deceased or totally or partially incapacitated eligible servicemen or of eligible servicemen in necessitous or deserving circumstances;
- (iii) the dependants of eligible servicemen other than those mentioned in paragraph (ii) above, which dependants are, in the opinion of the trustees, in necessitous circumstances or particularly deserving of assistance;
- (iv) the provision of relief or benefit for eligible servicemen and their dependants in such other cases as the trustees think fit.

The trustees have introduced schemes for providing—

- (a) welfare relief for ex-service men and women who are eligible for benefits and their dependants;
- (b) benefits for children of eligible ex-service men and women who are suffering from serious and incapacitating afflictions; and
- (c) education benefits for the children of eligible ex-service men and women.

Because over 1,000,000 men and women and all their dependants are eligible for benefits, the assistance that can be provided in individual cases is limited and the trustees have prescribed a policy for welfare relief which makes assistance available only to those who are in genuine distress from which they cannot extricate themselves by their own efforts. Family counselling services are provided wherever practicable. In determining the nature or amount of relief to be granted, care is taken to use the fund constructively with the object of assisting the applicant to achieve independence, and of discouraging any tendency towards increasing dependence on social welfare organizations. For example, the regular supplementing of pension or low income for an indefinite period is contrary to the policy of the trustees, as it is quite impossible for the fund to assume a general responsibility of that nature. Instead, every effort is made to assist the applicant to adjust his mode of living or to increase his income himself so that he may live within it. Either the applicant, or his dependants, should be deserving of assistance.

From its inauguration in 1947, the Fund is to be available for 40 years for welfare relief, and for 30 years for educational benefits.

Applications are carefully investigated to determine the bona fides of the applicant and the case presented, and to help regional committees in deciding the kind of assistance, if any, to be given. Where possible, investigations are made by trained social workers on the staff either of the Fund or of recognized agencies.

The following amounts of welfare relief have been granted from the Fund:—

Recipients.	Year 1958.	Total to 31st December, 1958.
	£	£
Ex-service men and women .. .. .	60,322	724,765
Widows and orphans .. .. .	26,493	293,605
<b>Total .. .. .</b>	<b>86,815</b>	<b>1,018,370</b>

A total of 24,020 ex-service men and women, 8,867 widows and orphans were granted welfare assistance from the Fund to 31st December, 1958.

Of all persons eligible for assistance from the Fund, widows and orphans are likely to be in greatest need, especially in the period immediately following the death of an ex-serviceman. Consequently, every effort is made to locate these widows and orphans and their degree of need is interpreted more liberally than is that of ex-servicemen.

Also particularly deserving of assistance are dependent children suffering from afflictions which permanently disable or seriously retard their progress or prevent the enjoyment of normal health and strength, and present a prospect of complete or partial dependence on others for all or part of their lives. The trustees introduced a plan to ensure that any eligible child suffering from a serious affliction may be assisted as necessary to have access to whatever treatment or facilities are available to help the child to become as normal, self-reliant, self-supporting, socially acceptable, mobile, and happy as possible, despite his or her handicap. The extent to which assistance will be granted in a particular case depends largely on the nature of the child's affliction, the facilities available, the family circumstances, and the funds that can be made available.

Up to 31st December, 1958, 1,732 afflicted children had been assisted under the Afflicted Children's Scheme involving an expenditure of £83,254.

Educational assistance is restricted to children who are 15 years of age and over, except in the case of orphans, when assistance commences at the age of 12 years, or in the case of orphans eligible for education allowances from the Repatriation Department, where education assistance is granted from the age of 13. The object of the trustees is to assist eligible children to obtain the highest education within their capacity.

Educational assistance from the Fund is in the form of awards ranging from £5 to £200 a year depending on the cost of the course undertaken and the family circumstances. These awards are granted for practically every type of course of education, whether secondary, tertiary or commercial. They are designed to cover, or contribute towards, the cost of essential books, fees in cases where government school courses are not available, fares between the child's home and school, essential equipment and material, a uniform allowance in certain years and a maintenance allowance for the child while at school.

The educational scheme also provides for one post-graduate scholarship each year for study overseas, valued at £1,000 per annum for three years.

Two post-graduate nursing awards are tenable in Australia each year. They cover fees, fares, books and a maintenance allowance at the rate of £6 per week for the duration of the course. In addition, post-graduate nursing awards are granted for post-graduate nursing training overseas in courses which are not available in Australia.

The number of children assisted under the educational scheme to 31st December, 1958, was 23,820, and the expenditure on educational awards, post-graduate scholarships and post-graduate nursing awards to 31st December, 1958, was £1,183,748.

## § 6. Seamen's War Pensions and Allowances.

The Seamen's War Pensions and Allowances Act 1940 provides for the grant of—

- (a) pensions to Australian mariners and their dependants if the mariner, during the course of his employment, sustained injury through enemy action;
- (b) pensions to dependants of Australian mariners who, while in employment, were killed by enemy action;
- (c) detention allowances to Australian mariners and their dependants (if any) during any period of detention of mariners after capture by the enemy; and
- (d) compensation to Australian mariners in respect of personal effects lost or damaged through enemy action.

Regulations passed in 1942 provided that the wages of an Australian mariner, less the amount of any detention allowance, should continue if, while employed in sea-going service under articles of agreement entered into in Australia, or in the case of a pilot while employed on pilot duty, he fell into the hands of the enemy as a result of that employment and that the wages so continuing should be applied for the benefit of the mariner and his dependants. The wages would be paid by the Government of the Commonwealth of Australia for the first 18 months of the mariner's detention if he was employed in a ship owned by, or under requisition to, that Government, the United Kingdom Government or the Government of any country in the British Commonwealth, and thereafter irrespective of his employment.

Subsequent amendments to the Act and regulations raised pensions to rates corresponding to those payable under the Repatriation Act, and made mariners eligible for general benefits on the same scale as those available under that Act.

The following table gives a summary of the main statistics relating to seamen's war pensions and allowances.

**SEAMEN'S WAR PENSIONS AND ALLOWANCES: SUMMARY, AUSTRALIA.**

Year.	12 months ended 30th June.			Pensions payable at 30th June—			
	Pensions Granted.	Claims Rejected.	Expenditure.	To Incapacitated Mariners.	To Dependants of Incapacitated Mariners.	To Dependants of Deceased Mariners.	Total.
	No.	No.	£	No.	No.	No.	No.
1954 ..	3	34	24,436	39	27	136	202
1955 ..	20	40	27,805	52	34	130	216
1956 ..	24	15	30,416	52	48	127	227
1957 ..	27	38	32,629	54	65	115	234
1958 ..	22	33	34,261	52	61	102	215

## CHAPTER XXX.

### MISCELLANEOUS.

This chapter comprises miscellaneous statistics and other descriptive information not directly related to the subjects of the preceding chapters, arranged in sections as follows:—

1. Valuation of Australian Production; 2. Indexes of Production; 3. Consumption of Foodstuffs and Beverages; 4. Patents, Trade Marks and Designs; 5. Copyright; 6. Australian Shipbuilding Board; 7. Commonwealth Scientific and Industrial Research Organization; 8. Mount Stromlo Observatory; 9. Standards Association of Australia; 10. Film Censorship Board; 11. Australian National Film Board and the Film Division; 12. National Safety Council of Australia; 13. Australian Road Safety Council; 14. Australian Atomic Energy Commission; 15. The United Nations; 16. Australian Representation Abroad: Oversea Representation in Australia; 17. Retail Trade.

#### § 1. Valuation of Australian Production.

1. **General.**—The value of production for Australia is computed in accordance with the decisions reached at the Conferences of Australian Statisticians and principally at the Conference held in 1935. The figures published below have been compiled by the State Statisticians from the latest data available, and relate to 1956–57 and 1957–58. The adoption of substantially uniform methods of valuing production and of estimating elements of costs of production and marketing renders the results comparable as between States.

Attention is directed to the fact that the values shown in the tables herein refer only to the production of primary industries and factories and exclude the building and construction industry, those industrial establishments not classified as factories, and certain agricultural and farmyard produce obtained from areas of less than one acre.

The following is a brief explanation of the terms used:—

- (a) *Gross Value of Production* is the value placed on recorded production at the wholesale price realized at the principal markets. In cases where primary products are consumed at the place of production or where they become raw material for a secondary industry, these points of consumption are presumed to be the principal markets.
- (b) *Local Value* (i.e., the gross production valued at the place of production) is ascertained by deducting marketing costs from the gross value. Marketing costs include freight, cost of containers, commission, and other charges incidental thereto.
- (c) *Net Value of Production* represents local value less value of materials used in the process of production. Materials used in the process of production include seed, power, power kerosene, petrol and other oils, fodder consumed by farm stock, manures, dips, sprays and other costs. No deductions have been made for depreciation or certain maintenance costs as particulars are not available for all States. The Net Value of Production is the only satisfactory measure to use when comparing or combining the value of primary industries with those of other industries.

Power costs (power, power kerosene, petrol and other oils) have not been deducted in New South Wales since 1940–41 when they amounted to £1,892,000 and in Tasmania since 1941–42, when they amounted to £86,510. Consequently net values of production for later years in these two States are overstated. Costs of materials used in the process of production are not available for all States in respect of Bee-farming, Trapping, Forestry and Fisheries, and local values have been used for these industries with consequent overstatement in net values.

2. Value of Production, Australia, 1956-57 and 1957-58.—The following table shows particulars of the gross, local and net values of production in Australia by industries during the years 1956-57 and 1957-58.

**GROSS, LOCAL AND NET VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES : AUSTRALIA.**

(£'000.)

Industry.	Gross Production Valued at Principal Markets.	Local Value—Gross Production Valued at Place of Production.	Net Value of Production (with-out deduction of depreciation or maintenance).
1956-57.			
Agriculture .. .. .	352,148	299,659	254,861
Pastoral .. .. .	678,070	633,303	597,681
Dairying .. .. .	188,852	175,493	141,211
Poultry .. .. .	54,997	49,331	28,402
Bee-farming .. .. .	2,530	2,254	(a) 2,254
<i>Total, Rural</i> .. .. .	<i>1,276,597</i>	<i>1,160,040</i>	<i>1,024,409</i>
Trapping .. .. .	6,697	6,013	(a) 6,013
Forestry .. .. .	55,566	52,099	(a) 52,099
Fishing and Whaling .. .. .	11,554	10,506	(a) 10,506
Mines and Quarries .. .. .	(a) 176,320	176,320	139,977
<i>Total, Non-rural</i> .. .. .	<i>250,137</i>	<i>244,938</i>	<i>208,595</i>
<i>Total, All Primary Factories</i> .. .. .	(b) <i>1,526,734</i> <i>1,622,120</i>	(b) <i>1,404,978</i> <i>1,622,120</i>	<i>1,233,004</i> <i>1,622,120</i>
<b>Total, All Industries</b> .. .. .	<b>3,148,854</b>	<b>3,027,098</b>	<b>2,855,124</b>
1957-58.			
Agriculture .. .. .	340,231	295,554	243,817
Pastoral .. .. .	545,081	501,901	447,645
Dairying .. .. .	185,366	170,871	127,959
Poultry .. .. .	55,468	49,602	27,326
Bee-farming .. .. .	1,910	1,575	(a) 1,566
<i>Total, Rural</i> .. .. .	<i>1,128,056</i>	<i>1,019,503</i>	<i>848,313</i>
Trapping .. .. .	7,204	6,405	(a) 6,405
Forestry .. .. .	53,484	50,063	(a) 50,063
Fishing and Whaling .. .. .	11,407	10,403	(a) 10,403
Mines and Quarries .. .. .	(a) 167,422	167,422	128,867
<i>Total, Non-rural</i> .. .. .	<i>239,517</i>	<i>234,293</i>	<i>195,738</i>
<i>Total, All Primary Factories</i> .. .. .	(b) <i>1,367,573</i> <i>1,731,436</i>	(b) <i>1,253,796</i> <i>1,731,436</i>	<i>1,044,051</i> <i>1,731,436</i>
<b>Total, All Industries</b> .. .. .	<b>3,099,009</b>	<b>2,985,232</b>	<b>2,775,487</b>

(a) Local value.

(b) Net value.

3. Net Value of Production, States, 1956-57 and 1957-58.—The following tables show the total net value of production, and the net value per head of population, for each industry and State during the years 1956-57 and 1957-58:—

NET(a) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES  
(£'000.)

Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1956-57.									
Agriculture ..	48,425	63,802	60,127	49,688	24,640	7,978	58	143	254,861
Pastoral ..	231,674	129,883	112,366	62,093	47,343	10,666	2,338	1,118	597,681
Dairying ..	45,355	47,933	24,837	12,511	3,645	6,752	17	161	141,211
Poultry ..	11,592	12,506	838	1,597	697	1,015	50	107	28,402
Bee-farming(b) ..	905	506	161	388	268	24	..	2	2,254
<i>Total, Rural</i> ..	<i>337,951</i>	<i>254,630</i>	<i>198,529</i>	<i>126,277</i>	<i>76,593</i>	<i>26,433</i>	<i>2,463</i>	<i>1,531</i>	<i>1,024,409</i>
Trapping(b) ..	1,602	3,333	181	638	111	144	4	..	6,013
Forestry(b) ..	16,758	12,297	9,487	4,051	4,779	4,523	40	164	52,099
Fishing and Whalingb	2,939	1,178	1,575	1,295	2,737	609	173	..	10,506
Mining and Quarrying ..	72,048	9,457	24,148	9,487	14,350	8,298	2,084	105	139,977
<i>Total, Non-rural..</i>	<i>93,347</i>	<i>26,265</i>	<i>35,391</i>	<i>15,471</i>	<i>21,977</i>	<i>13,574</i>	<i>2,301</i>	<i>269</i>	<i>208,595</i>
<i>Total, All Primary Factories..</i>	<i>431,298</i>	<i>280,895</i>	<i>233,920</i>	<i>141,748</i>	<i>98,570</i>	<i>40,009</i>	<i>4,764</i>	<i>1,800</i>	<i>1,233,004</i>
Factories..	706,799	528,031	138,400	126,766	73,442	48,682	..	..	1,622,120
<b>Total, All Industries ..</b>	<b>1,138,097</b>	<b>808,926</b>	<b>372,320</b>	<b>268,514</b>	<b>172,012</b>	<b>88,691</b>	<b>4,764</b>	<b>1,800</b>	<b>2,855,124</b>

1957-58.

Agriculture ..	44,728	64,320	62,898	32,322	27,298	12,050	52	149	243,817
Pastoral ..	157,679	116,368	80,301	44,863	36,947	8,078	2,934	475	447,645
Dairying ..	44,767	44,687	18,725	9,364	3,422	6,841	29	124	127,959
Poultry ..	9,806	14,042	352	1,555	524	928	49	70	27,326
Bee-farming(b) ..	764	268	73	183	243	32	..	3	1,566
<i>Total, Rural</i> ..	<i>257,744</i>	<i>239,685</i>	<i>162,349</i>	<i>88,287</i>	<i>68,434</i>	<i>27,929</i>	<i>3,064</i>	<i>821</i>	<i>848,313</i>
Trapping(b) ..	1,865	3,651	226	483	60	116	4	..	6,405
Forestry(b) ..	15,276	11,912	9,414	3,587	5,110	4,547	38	179	50,063
Fishing and Whalingb	2,792	1,105	1,542	1,074	3,226	508	156	..	10,403
Mining and Quarrying ..	66,091	9,888	18,810	9,321	15,375	7,031	2,241	110	128,867
<i>Total, Non-rural..</i>	<i>86,024</i>	<i>26,556</i>	<i>29,992</i>	<i>14,465</i>	<i>23,771</i>	<i>12,202</i>	<i>2,439</i>	<i>289</i>	<i>195,738</i>
<i>Total, All Primary Factories..</i>	<i>343,768</i>	<i>266,241</i>	<i>192,341</i>	<i>102,752</i>	<i>92,205</i>	<i>40,131</i>	<i>5,503</i>	<i>1,110</i>	<i>1,044,051</i>
Factories..	758,301	568,750	143,958	133,285	75,312	51,830	..	..	1,731,436
<b>Total, All Industries ..</b>	<b>1,102,069</b>	<b>834,991</b>	<b>336,299</b>	<b>236,037</b>	<b>167,517</b>	<b>91,961</b>	<b>5,503</b>	<b>1,110</b>	<b>2,775,487</b>

(a) See letterpress on p. 1085.

(b) Local value.

NET(a) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES  
PER HEAD OF POPULATION.

(£ s. d.)

Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia. (b)
1956-57.							
Agriculture ..	13 9 11	24 3 4	43 11 1	57 13 8	35 19 11	24 9 3	26 14 7
Pastoral ..	64 11 4	49 3 11	81 10 10	72 1 9	69 3 3	32 14 1	62 13 8
Dairying ..	12 12 10	18 3 1	17 19 10	14 10 6	5 6 6	20 14 0	14 16 2
Poultry ..	3 4 7	4 14 9	12 2 1	1 17 1	1 0 4	3 2 3	2 19 7
Bee-farming(c) ..	5 1	3 10	2 4	9 0	7 10	1 6	4 9
<i>Total, Rural</i> ..	<i>94 3 9</i>	<i>96 8 11</i>	<i>143 16 3</i>	<i>146 12 0</i>	<i>111 17 10</i>	<i>81 1 1</i>	<i>107 8 9</i>
Trapping(c) ..	8 11	1 5 3	2 7	14 10	3 3	8 10	12 7
Forestry(c) ..	4 13 5	4 13 2	6 17 6	4 14 1	6 19 8	13 17 4	5 9 3
Fishing and Whalingc	16 5	8 11	1 2 10	1 10 1	4 0 0	1 17 4	1 2 0
Mines and Quarries	20 1 7	3 11 8	17 9 10	11 0 3	20 19 3	25 8 11	14 13 8
<i>Total, Non-rural..</i>	<i>26 0 4</i>	<i>9 19 0</i>	<i>25 12 9</i>	<i>17 19 3</i>	<i>32 2 2</i>	<i>41 12 5</i>	<i>21 17 6</i>
<i>Total, All Primary Factories..</i>	<i>120 4 1</i>	<i>106 7 11</i>	<i>169 9 0</i>	<i>164 11 3</i>	<i>144 0 0</i>	<i>122 13 6</i>	<i>129 6 3</i>
Factories..	196 19 9	200 0 1	100 5 1	147 3 4	107 5 9	149 5 5	170 2 6
<b>Total, All Industries</b>	<b>317 3 10</b>	<b>306 8 0</b>	<b>269 14 1</b>	<b>311 14 7</b>	<b>251 5 9</b>	<b>271 18 11</b>	<b>299 8 9</b>

For footnotes see next page.

NET (a) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES  
PER HEAD OF POPULATION—*continued.*

(£ s. d.)

Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia. (b)
1957-58.							
Agriculture ..	12 4 6	23 15 2	44 16 5	36 9 8	39 1 7	36 1 4	25 0 4
Pastoral ..	43 2 1	42 19 8	57 4 6	50 12 9	52 17 10	24 3 7	45 18 8
Dairying ..	12 4 9	16 10 2	13 6 11	10 11 5	4 18 0	20 9 6	13 2 7
Poultry ..	2 13 7	5 3 9	5 0	1 15 1	15 0	2 15 7	2 16 1
Bee-farming(c)	0 4 2	2 0	1 0	4 1	6 11	1 11	3 3
<i>Total, Rural</i> ..	<i>70 9 1</i>	<i>88 10 9</i>	<i>115 13 10</i>	<i>99 13 0</i>	<i>97 19 4</i>	<i>83 11 11</i>	<i>87 0 11</i>
Trapping(c) ..	10 2	7 0	3 3	10 11	1 9	6 11	13 2
Forestry(c) ..	4 3 6	4 8 0	6 14 2	4 0 11	7 6 4	13 12 2	5 2 9
Fishing and Whaling	15 3	8 2	1 2 0	1 4 3	4 12 4	1 10 5	1 1 4
Mines and Quarries	18 1 4	3 13 0	13 8 1	10 10 5	22 0 2	21 0 11	13 4 5
<i>Total, Non-rural..</i>	<i>23 10 3</i>	<i>9 16 2</i>	<i>21 7 6</i>	<i>16 6 6</i>	<i>34 0 7</i>	<i>36 10 5</i>	<i>20 1 8</i>
<i>Total, All Primary Factories..</i>	<i>93 19 4</i>	<i>98 6 11</i>	<i>137 1 4</i>	<i>115 19 6</i>	<i>131 19 11</i>	<i>120 2 4</i>	<i>107 2 7</i>
	207 5 8	210 1 9	102 11 9	150 8 10	107 16 3	155 2 7	177 13 3
<i>Total, All Industries</i>	<i>301 5 0</i>	<i>308 8 8</i>	<i>239 13 1</i>	<i>266, 8 4</i>	<i>239 16 2</i>	<i>275 4 11</i>	<i>284 15 10</i>

(a) See letterpress on p. 1085.  
(c) Local value.

(b) Includes the Northern Territory and the Australian Capital Territory.

4. Net Value of Production, Australia, 1953-54 to 1957-58.—The following table shows the net value of production for Australia during the years 1953-54 to 1957-58.

NET(a) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND  
FACTORIES : AUSTRALIA.

(£'000.)

Industry.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Agriculture ..	268,460	243,919	279,455	254,861	243,817
Pastoral ..	491,716	461,464	446,780	597,681	447,645
Dairying ..	136,956	135,798	155,243	141,211	127,959
Poultry ..	34,782	29,787	30,185	28,402	27,326
Bee-farming(b)	1,426	1,398	1,751	2,254	1,566
<i>Total, Rural</i> ..	<i>933,340</i>	<i>872,366</i>	<i>913,414</i>	<i>1,024,409</i>	<i>848,313</i>
Trapping(b) ..	5,074	4,961	6,047	6,013	6,405
Forestry(b) ..	41,720	44,047	50,059	52,099	50,063
Fishing and Whaling(b)	7,741	8,727	8,884	10,506	10,403
Mines and Quarries ..	104,875	118,087	132,508	139,977	128,867
<i>Total, Non-rural ..</i>	<i>159,410</i>	<i>175,822</i>	<i>197,498</i>	<i>208,595</i>	<i>195,738</i>
<i>Total, All Primary Factories ..</i>	<i>1,092,750</i>	<i>1,048,188</i>	<i>1,110,912</i>	<i>1,233,004</i>	<i>1,044,051</i>
	1,227,045	1,365,509	1,500,714	1,622,120	1,731,436
<i>Total, All Industries</i>	<i>2,319,795</i>	<i>2,413,697</i>	<i>2,611,626</i>	<i>2,855,124</i>	<i>2,775,487</i>

(a) See letterpress on p. 1085.

(b) Local value.

In the chapters dealing with the respective industries (except trapping and mines and quarries), tables will be found showing the total value of production and the value per head of population for the industry by States for a series of years up to 1957-58.

## § 2. Indexes of Production.

In the first two tables in this section, indexes of price and quantum (i.e. value at constant prices) of production are given for the following industrial groups, namely:—Agriculture, Pastoral, Farmyard and Dairying, and All Farming combined (including separate indexes for Wool and Products other than Wool). In the third table, indexes of quantum (i.e. value at constant prices) of production, exports and consumption of farm products for food use are shown. Indexes previously published in respect of Gold and Other Minerals, and All Mining combined, are under review and pending completion of investigations the publication of these results has been discontinued.

1. **Farm Production Price Indexes.**—The Farm Production Price Indexes shown in the following table relate to average "prices" of agricultural, pastoral, farmyard and dairying products realized at the principal markets of Australia. The "price" data used are average unit values for the total quantities of the relevant commodities produced or marketed in each year and the index numbers therefore measure both the effects of changes in prices (as such) and of variations in the quality, type, usage, etc. of products marketed. The index numbers for any year relate to the average values of products produced or marketed in that year, irrespective of the periods in which payment is received by producers.

The indexes have been calculated by the fixed-base weighted aggregative method. "Prices" for each commodity in any year are obtained by dividing gross value of production by the quantity produced in that year. In the original published series of Production Price Index Numbers, the average quantities of the relevant commodities *produced* in the period 1923-24 to 1927-28 were used as fixed weights. This series, re-computed to the base, average 1936-37 to 1938-39 = 100, was published in earlier issues of the Official Year Book (see No. 43, page 1050). For 1936-37 and later years, the original series was replaced in December, 1952, by a revised series in which average quantities of each product *marketed* during the period 1946-47 to 1950-51 were used as fixed weights. In the revised series, the regimen was extended and modified to include farm products (as defined by Australian Statisticians) in all cases. Certain other refinements were also incorporated in the revised indexes, the principal of which was the omission from the weights used for the All Farming Index of quantities of crops marketed for livestock feeding in Australia.

**FARM PRODUCTION: INDEXES OF PRICES AT PRINCIPAL MARKETS,  
AUSTRALIA.**

(Base: Average 1936-37 to 1938-39 = 100.)

Year.	Agri- culture.	Pastoral.	Farm- yard and Dairying.	All Farming.	Wool (Shorn and Dead).	Products other than Wool.
1936-37 .. .. .	114	115	93	109	126	104
1937-38 .. .. .	98	98	102	99	95	100
1938-39 .. .. .	88	87	105	92	79	96
1939-40 .. .. .	100	105	105	104	102	105
1940-41 .. .. .	106	107	105	107	102	108
1941-42 .. .. .	111	108	107	110	102	113
1942-43 .. .. .	131	123	130	128	118	132
1943-44 .. .. .	149	128	147	139	118	146
1944-45 .. .. .	151	128	152	142	118	150
1945-46 .. .. .	174	133	159	157	118	169
1946-47 .. .. .	194	182	157	185	187	185
1947-48 .. .. .	267	263	183	247	301	230
1948-49 .. .. .	234	313	197	260	366	225
1949-50 .. .. .	272	396	228	316	483	261
1950-51 .. .. .	291	818	258	505	1,098	308
1951-52 .. .. .	355	501	332	410	552	363
1952-53 .. .. .	364	531	387	440	623	379
1953-54 .. .. .	324	534	395	429	621	355
1954-55 .. .. .	316	489	371	401	540	365
1955-56 .. .. .	330	451	392	397	468	373
1956-57(a) .. .. .	336	536	386	432	607	374
1957-58(b) .. .. .	341	437	380	390	476	362

(a) Revised.

(b) Subject to revision.

2. **Indexes of Quantum (i.e. Value at Constant Prices) of Farm Production.**—The indexes shown in the following table relate to gross output of farm products valued at constant prices. They have been calculated by revaluing quantities of each farm product included in the indexes at the average unit gross value of each product for the base years.

In the original published series, the period 1923–24 to 1927–28 was adopted as the base for revaluing each farm product. This series, re-computed to the base, average 1936–37 to 1938–39 = 100, was published in earlier issues of the Official Year Book (*see* No. 43, page 1051). For 1936–37 and later years, the original series was replaced in December, 1952 by a revised series in which average unit values for the period 1936–37 to 1938–39 were used. The regimen used for the revised series was extended and modified to include farm products (as defined by Australian Statisticians) in all cases. Certain other refinements were incorporated in the revised indexes, the principal of which was the omission, in calculating the All Farming Index, of quantities of crops fed to livestock in Australia.

### INDEXES OF QUANTUM(a) OF FARM PRODUCTION, AUSTRALIA.

(Base: Average 1936–37 to 1938–39 = 100.)

Year.	Agriculture.	Pastoral.	Farm-yard and Dairying.	All Farming.	Wool (Shorn and Dead).	Products other than Wool.
1936–37	97	98	97	97	99	96
1937–38	107	103	101	104	103	105
1938–39	96	99	102	99	98	99
1939–40	120	107	108	107	115	105
1940–41	74	109	107	97	115	91
1941–42	104	112	104	104	118	99
1942–43	97	114	103	102	116	98
1943–44	86	115	100	100	119	94
1944–45	68	101	99	88	101	84
1945–46	100	86	103	92	92	92
1946–47	84	92	103	91	95	90
1947–48	122	98	107	109	101	111
1948–49	108	105	111	109	108	109
1949–50	117	112	111	115	115	115
1950–51	108	109	106	109	116	107
1951–52	103	105	97	103	112	100
1952–53	121	126	108	121	131	118
1953–54	129	123	107	122	128	120
1954–55	120	127	117	123	132	120
1955–56	134	136	120	131	146	127
1956–57(b)	120	148	117	131	164	121
1957–58(c)	109	142	113	123	148	116

(a) Indexes of value at constant prices, i.e., quantities revalued at average unit values for the base years (*see* text preceding table). (b) Revised. (c) Subject to revision.

3. **Farm Products for Food Use: Indexes of Quantum (i.e. Value at Constant Prices) of Production, Exports and Consumption.** The indexes shown in the following table have been calculated by revaluing quantities of each farm product included in the indexes at the average unit gross value of each product for the years 1936–37 to 1938–39. The items included comprise products in the form in which they are sold from farms in all cases except livestock sold for slaughter for meat, which are included in terms of dressed carcass weight of meat. Quantity data relating to exports include exports of processed food in terms of farm product equivalent. The indexes of production relate basically to gross output of farm products for food use, including crops exported for stock-feeding overseas. Particulars are not available prior to 1946–47 except for the base years.

**FARM PRODUCTS FOR FOOD USE : INDEXES OF QUANTUM<sup>(a)</sup> OF PRODUCTION, EXPORTS AND CONSUMPTION.**

*(Base: Average 1936-37 to 1938-39 = 100.)*

Year.	Production.		Exports.		Consumption in Australia.	
	Total.	Per Head of Total Population.	Total.	Per Head of Total Population.	Total.	Per Head of Total Population.
1947-48..	113	102	113	102	110	99
1948-49..	110	97	112	99	111	98
1949-50..	116	99	116	99	114	98
1950-51..	109	90	104	86	120	99
1951-52..	100	81	70	57	119	96
1952-53..	118	93	113	89	119	94
1953-54..	122	94	102	79	124	96
1954-55..	121	91	117	89	127	96
1955-56	129	95	131	97	131	97
1956-57(b)	123	88	118	85	137	98
1957-58(b)	111	78	82	58	138	97

(a) Indexes of value at constant prices, i.e., quantities revalued at average unit values for the base years (1936-37 to 1938-39). (b) Subject to revision.

### § 3. Consumption of Foodstuffs and Beverages.

1. **Quantities Consumed.**—Issues of the Official Year Book up to No. 36 included a statistical survey of the movement in the consumption in Australia, in total and per head of population, of a selected number of commodities over a period of years up to 1940-41 (see Official Year Book No. 36, pp. 1098-1100). In issue No. 37, these long-term comparisons were replaced by more detailed information covering consumption of the principal foodstuffs and beverages in annual periods since 1944 in comparison with average annual consumption during the three years ended 1938-39. In this issue, the annual periods extend from 1953-54 to 1957-58.

The estimates of total consumption and consumption per head of population in Australia in the two tables which follow have been compiled by deducting net exports from production and allowing for recorded movements in stocks of the respective commodities. While the estimates may generally be accepted as reasonably accurate, there are some deficiencies to which attention should be directed. These relate chiefly to the quantities of poultry, game and fish (fresh and shell) and the quantities of visible oils and other fats entering consumption. In addition, little information is available on the quantities of vegetables, fruit, eggs, etc., which householders produce for their own requirements and the extent of wastage occurring in the marketing of foodstuffs. In all these cases, careful estimates have been compiled from the best available data, and the quantities shown as entering consumption in Australia have been adjusted to allow for these circumstances. The absence of particulars for stocks of certain commodities has resulted in some inaccuracies in the estimates of annual consumption. Consumption of foodstuffs is measured in general at "producer" level. As a result, no allowance is made for wastage before the foodstuffs are consumed. In recent years, wastage of foodstuffs has possibly been less than hitherto because of more efficient distribution and storage methods. Furthermore, it is likely that the quantities of foodstuffs shown in the following pages as available for consumption have been supplemented by an increase in the aforesaid production by householders for their own requirements. Neither of these factors has been taken into account, and it is possible that, as a result, some understatement has occurred in the following consumption estimates. Except in a few special cases, no adjustment has been made for changes in stocks held by wholesalers and retailers. Where no allowance is made, it is considered unlikely that these stocks would make any appreciable difference to consumption estimates. Allowance has

not been made for the purchase of foodstuffs for dispatch overseas as gifts in bulk and by parcel post. These deficiencies, however, do not seriously impair the accuracy of the estimates compiled.

The estimates of consumption per head of population shown in the second of the following tables have been checked, wherever possible, with data from other sources (principally from the Food Consumption Survey conducted in 1944 by the Nutrition Committee of the National Health and Medical Research Council) which confirm the reliability of the methods used.

More detailed information on the consumption of foodstuffs and beverages is contained in the Statistical Bulletin: *Food Production and the Consumption of Foodstuffs and Nutrients in Australia*, issued by this Bureau.

**ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY: AUSTRALIA.**

Commodity.	Unit of Quantity.	Average 1936-37 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58. (a)
<b>Milk and Milk Products—</b>							
Fluid Whole Milk .. ..	Mil. gals.	161	253	258	266	272	275
Fresh Cream .. ..	'000 tons	19.7	8.0	8.1	8.3	8.5	8.7
<b>Full Cream Milk Products—</b>							
Condensed, Concentrated and Evaporated Full Cream Milk—							
Sweetened .. ..	"	(b)	10.8	9.9	10.7	10.9	6.1
Unsweetened .. ..	"	(b)	24.4	17.0	23.7	26.3	29.6
Powdered Full Cream Milk .. ..	"	8.1	10.4	9.6	9.7	9.6	12.7
Infants and Invalids Foods .. ..	"	3.0	9.5	7.9	10.6	8.6	10.0
<b>Milk By-Products—</b>							
Condensed, Concentrated, and Evaporated Skim Milk and Butter-milk .. ..	"	(b)	1.0	6.1	3.9	4.7	6.3
Powdered Skim Milk .. ..	"	"	3.9	5.7	8.7	9.8	8.8
Cheese .. ..	"	13.4	23.9	25.4	23.9	22.5	27.8
<i>Total (in terms of Milk Solids) .. ..</i>	"	120.5	188.5	192.2	200.9	205.1	212.8
<b>Meat—</b>							
Beef (bone-in-weight) .. ..	"	442.0	455.2	472.6	495.4	550.4	527.4
Mutton (bone-in-weight) .. ..	"	183.4	204.4	211.5	204.2	199.2	216.5
Lamb (bone-in-weight) .. ..	"	46.1	106.8	105.6	109.1	117.8	121.8
Pork (bone-in weight) .. ..	"	31.8	30.5	41.4	40.3	36.7	43.2
Offal .. ..	"	25.7	41.9	43.5	42.3	44.4	50.1
Canned Meat (canned weight) .. ..	"	(c)	7.9	12.4	14.3	13.9	17.5
Bacon and Ham (cured weight) .. ..	"	31.4	28.5	32.2	31.3	29.7	30.0
<i>Total (in terms of carcass weight) .. ..</i>	"	776.1	887.8	939.9	963.2	1,010.6	1,029.7
<b>Poultry, Game and Fish—</b>							
Poultry and Rabbits (carcass weight) .. ..	"	29.8	60.2	61.4	63.0	64.4	65.9
<b>Fish(d) .. ..</b>							
Fresh .. ..	"	19.7	22.5	21.2	20.2	21.9	22.8
Cured (including Smoked and Salted) .. ..	"	(e)	3.2	4.0	4.4	2.2	5.5
Crustaceans and Molluscs .. ..	"	2.1	3.3	4.6	3.9	3.8	3.4
Canned—Australian origin .. ..	"	"	3.1	2.5	2.5	3.5	2.8
Imported .. ..	"	"	6.8	8.8	10.3	7.1	7.8
<i>Total(d) .. ..</i>	"	51.5	73.7	76.5	77.7	75.7	80.7
<b>Eggs and Egg Products—</b>							
Shell Eggs .. ..	"	78.7	82.8	85.9	87.9	91.7	91.4
Liquid Whole Egg(f) .. ..	"	2.9	5.4	6.5	4.9	6.1	5.3
Egg Powder(f) .. ..	"	"	0.2	0.1	0.2	0.3	0.1
<i>Total (Shell Egg equivalent) .. ..</i>	Mil. Doz.	81.6	88.4	92.5	93.0	98.1	96.8
		139.3	150.9	157.9	158.8	167.4	165.2
<b>Fats and Oils—</b>							
Butter .. ..	'000 tons	101.0	121.6	122.5	120.4	119.4	121.0
<b>Margarine—</b>							
Table .. ..	"	2.8	8.5	9.1	12.3	15.4	15.7
Other .. ..	"	12.2	22.3	22.0	19.2	19.9	21.0
Lard .. ..	"	5.2	3.9	5.1	4.8	4.6	5.2
Vegetable Oils and Other Fats .. ..	"	14.4	15.9	16.2	16.6	17.0	17.4
<i>Total (Fat Content) .. ..</i>	"	115.5	146.3	148.8	147.5	150.2	153.8

See next page for notes.

ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY: AUSTRALIA—continued.

Commodity.	Unit of Quantity.	Average 1936-37 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58. (a)
<b>Sugar and Syrups—</b>							
Refined Sugar—							
As Sugar .. .. .	'000 tons	216.5	258.4	256.3	259.5	<sup>a</sup> 260.2	259.6
In manufactured products .. .. .	"	110.1	187.9	205.9	219.4	<sup>a</sup> 220.1	231.0
Honey, Glucose and Syrups .. .. .	"	21.9	25.1	22.3	21.0	30.0	26.3
<i>Total (Sugar Content) .. .. .</i>	"	<i>343.9</i>	<i>466.4</i>	<i>480.0</i>	<i>495.7</i>	<i>504.2</i>	<i>511.5</i>
<b>Potatoes—</b>							
White .. .. .	"	318.5	485.4	417.1	368.9	459.5	518.1
Sweet .. .. .	"	7.4	5.6	5.7	5.8	5.9	6.1
<i>Total .. .. .</i>	"	<i>325.9</i>	<i>491.0</i>	<i>422.8</i>	<i>374.7</i>	<i>465.4</i>	<i>524.2</i>
<b>Pulse and Nuts—</b>							
Dried Pulse .. .. .	"	4.5	14.9	11.5	12.2	14.0	13.2
Peanuts (weight without shell) .. .. .	"	2.8	7.5	9.9	4.2	2.8	9.2
Edible Tree Nuts (weight without shell) .. .. .	"	2.6	6.8	7.7	5.9	6.2	7.6
Cocoa (Raw Beans) .. .. .	"	6.3	11.3	9.8	10.7	12.4	11.7
<i>Total .. .. .</i>	"	<i>16.2</i>	<i>40.5</i>	<i>38.9</i>	<i>33.0</i>	<i>35.4</i>	<i>41.7</i>
<b>Tomatoes and Fruit—</b>							
Tomatoes(g) .. .. .	"	(h) 48.0	73.8	104.0	107.3	137.5	113.1
Citrus Fruit(g) .. .. .	"	97.8	150.7	143.6	167.9	160.7	153.2
Other Fresh Fruit .. .. .	"	288.2	316.3	306.7	371.1	302.7	361.2
Jams .. .. .	"	35.1	36.1	37.5	40.4	41.4	34.5
Dried Fruit .. .. .	"	24.8	29.3	32.0	22.6	22.6	30.5
Canned Fruit .. .. .	"	31.9	48.3	56.3	57.5	56.8	60.0
<i>Total (Fresh Fruit equivalent) .. .. .</i>	"	<i>580.3</i>	<i>731.2</i>	<i>766.1</i>	<i>830.4</i>	<i>781.0</i>	<i>842.4</i>
<b>Vegetables—</b>							
Leafy, Green and Yellow Vegetables .. .. .	"	(b)	171.3	168.4	172.4	194.9	188.9
Other Fresh Vegetables .. .. .	"	(b)	245.9	237.4	235.3	270.2	292.0
Canned Vegetables .. .. .	"	(b)	18.2	20.1	20.9	25.7	22.4
<i>Total .. .. .</i>	"	<i>(b)</i>	<i>435.4</i>	<i>425.9</i>	<i>428.6</i>	<i>490.8</i>	<i>503.3</i>
<b>Grain Products—</b>							
<b>Flour—</b>							
White .. .. .	"	} 574.0	721.2	721.8	727.9	762.1	} 788.5
Sharps .. .. .	"		2.1	1.6	1.9	1.5	
Wheatmeal for baking .. .. .	"		31.4	29.4	28.1	27.8	
Breakfast Foods .. .. .	"	(i) 32.5	51.7	52.9	54.8	61.8	56.1
Rice (Milled) .. .. .	"	12.2	14.7	14.2	15.4	15.8	16.1
Tapioca, Sago, etc. .. .. .	"	3.7	1.6	1.4	1.6	1.2	1.9
Pearl Barley .. .. .	"	3.0	2.1	2.2	2.0	2.1	1.9
Barley Meal and Polished Wheat (Rice substitute) .. .. .	"	..	0.8	0.8	0.6	0.6	0.6
Edible Starch (Cornflour) .. .. .	"	4.3	3.9	3.4	3.5	3.3	2.5
<i>Total .. .. .</i>	"	<i>629.7</i>	<i>829.5</i>	<i>827.7</i>	<i>835.8</i>	<i>876.2</i>	<i>867.6</i>
<b>Beverages—</b>							
Tea .. .. .	"	21.1	27.0	24.3	24.5	26.2	26.1
Coffee .. .. .	"	2.0	4.3	4.5	5.5	6.7	6.6
Beer .. .. .	Mil. gals.	80.1	205.2	220.5	225.1	218.1	224.1
Wine .. .. .	"	4.2	12.4	10.1	10.3	10.9	11.1

(a) Subject to revision. (b) Not available. (c) Included with fresh meat at its carcass weight. (d) Edible weight. (e) Included with fresh. (f) In terms of weight of shell eggs. (g) Includes fresh equivalent of manufactured products. (h) Probably understated owing to lack of complete data. (i) Excludes invalid and health foods, semolina and wheat germ.

## ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY PER HEAD OF POPULATION : AUSTRALIA.

Commodity.	Unit of Quantity.	Average 1936-37 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58. (a)
<b>Milk and Milk Products—</b>							
Fluid Whole Milk .. ..	Gallon	23.4	28.4	28.4	28.5	28.5	28.2
Fresh Cream .. ..	lb.	6.4	2.0	2.0	2.0	2.0	2.0
<b>Full Cream Milk Products—</b>							
Condensed, Concentrated and Evaporated Full Cream Milk—							
Sweetened .. ..	"	(b)	2.7	2.4	2.6	2.6	1.4
Unsweetened .. ..	"	(b)	6.1	4.2	5.7	6.2	6.8
Powdered Full Cream Milk .. ..	"	2.6	2.6	2.4	2.3	2.2	2.9
Infants and Invalids Foods .. ..	"	1.0	2.4	1.9	2.6	2.0	2.3
<b>Milk By-Products—</b>							
Condensed, Concentrated and Evaporated Skim Milk and Butter-milk .. ..	"	(b)	0.3	1.5	0.9	1.1	1.5
Powdered Skim Milk .. ..	"	..	1.0	1.4	2.1	2.4	2.0
Cheese .. ..	"	4.4	6.0	6.3	5.7	5.3	6.4
<i>Total (in terms of Milk Solids) .. ..</i>	"	39.3	47.5	47.5	48.2	48.2	48.9
<b>Meat—</b>							
Beef (bone-in-weight) .. ..	"	144.1	114.6	116.5	119.1	129.3	121.2
Mutton (bone-in-weight) .. ..	"	59.8	51.4	52.1	49.1	46.8	49.8
Lamb (bone-in-weight) .. ..	"	15.0	26.9	26.0	26.2	27.7	28.0
Pork (bone-in-weight) .. ..	"	10.4	7.7	10.2	9.7	8.6	9.9
Offal .. ..	"	8.4	10.6	10.7	10.2	10.4	11.5
Canned Meat (canned weight) .. ..	"	(c)	2.0	3.0	3.4	3.3	4.0
Bacon and Ham (cured weight) .. ..	"	10.2	7.2	7.9	7.5	7.0	6.9
<i>Total (in terms of carcass weight) .. ..</i>	"	253.0	223.5	231.6	231.6	237.4	236.7
<b>Poultry, Game and Fish—</b>							
Poultry and Rabbits (carcass weight) .. ..	"	9.7	15.1	15.1	15.1	15.1	15.1
<b>Fish(d)—</b>							
Fresh .. ..	"	6.4	5.7	5.2	4.9	5.1	5.3
Cured (including Smoked and Salted) .. ..	"	(e)	0.8	1.0	1.1	0.5	1.3
Crustaceans and Molluscs.. ..	"	0.7	0.8	1.2	1.0	0.9	0.8
Canned—							
Australian origin .. ..	"	4.1	0.8	0.6	0.6	0.8	0.6
Imported .. ..	"	..	1.7	2.2	2.5	1.7	1.8
<i>Total(d) .. ..</i>	"	16.8	18.6	19.0	18.9	17.8	18.6
<b>Eggs and Egg Products—</b>							
Shell Eggs .. ..	"	25.7	20.8	21.2	21.1	21.5	21.0
Liquid Whole Egg(f) .. ..	"	0.9	1.4	1.6	1.2	1.4	1.2
Egg Powder(f) .. ..	"	..	0.1	0.0	0.1	0.1	..
<i>Total (Shell Egg equivalent) .. ..</i>	{ No.	26.6 243	22.3 204	22.8 209	22.4 205	23.0 210	22.2 203
<b>Fats and Oils—</b>							
Butter .. ..	lb.	32.9	30.6	30.2	29.0	28.0	27.8
<b>Margarine—</b>							
Table .. ..	"	0.9	2.1	2.3	3.0	3.6	3.6
Other .. ..	"	4.0	5.6	5.4	4.6	4.7	4.8
Lard .. ..	"	1.7	1.0	1.3	1.2	1.1	1.2
Vegetable Oils and other Fats .. ..	"	4.7	4.0	4.0	4.0	4.0	4.0
<i>Total (Fat Content) .. ..</i>	"	37.6	36.8	36.8	35.6	35.3	35.3
<b>Sugar and Syrups—</b>							
Refined Sugar—							
As Sugar .. ..	"	70.6	65.0	63.3	62.4	(a) 61.1	59.7
In manufactured products .. ..	"	35.9	47.3	50.7	52.7	(a) 51.7	53.1
Honey, Glucose and Syrups .. ..	"	7.1	6.3	5.5	5.1	7.0	6.0
<i>Total (Sugar Content) .. ..</i>	"	112.0	117.3	118.4	119.1	118.4	117.5

See next page for notes.

ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY PER HEAD OF POPULATION: AUSTRALIA—*continued.*

Commodity.	Unit of Quantity.	Average 1936-37 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58 (a)
<b>Potatoes—</b>							
White .. .. .	lb.	103.8	122.2	102.8	88.7	108.0	119.1
Sweet .. .. .	"	2.4	1.4	1.4	1.4	1.4	1.4
<i>Total .. .. .</i>	"	<i>106.2</i>	<i>123.6</i>	<i>104.2</i>	<i>90.1</i>	<i>109.4</i>	<i>120.5</i>
<b>Pulse and Nuts—</b>							
Dried Pulse .. .. .	"	1.5	3.7	2.8	3.0	3.3	3.3
Peanuts (weight without shell) .. .. .	"	0.9	1.9	2.4	1.0	0.7	2.1
Edible Tree Nuts (weight without shell) .. .. .	"	0.8	1.7	1.9	1.4	1.5	1.7
Cocoa (Raw Beans) .. .. .	"	2.1	2.8	2.4	2.6	2.9	2.7
<i>Total .. .. .</i>	"	<i>5.3</i>	<i>10.1</i>	<i>9.5</i>	<i>8.0</i>	<i>8.4</i>	<i>9.8</i>
<b>Tomatoes and Fruit—</b>							
Tomatoes(g) .. .. .	"	(h) 15.7	18.6	25.6	25.8	32.3	26.0
Citrus Fruit(g) .. .. .	"	31.9	37.9	35.4	40.4	37.8	35.2
Other Fresh Fruit .. .. .	"	94.0	79.6	75.6	89.2	71.1	83.0
Jams .. .. .	"	11.4	9.1	9.2	9.7	9.7	7.9
Dried Fruit .. .. .	"	8.1	7.3	7.9	5.4	5.3	7.0
Canned Fruit .. .. .	"	10.7	12.2	13.9	13.8	13.4	13.8
<i>Total (Fresh Fruit equivalent) .. .. .</i>	"	<i>189.2</i>	<i>184.0</i>	<i>188.8</i>	<i>199.6</i>	<i>183.2</i>	<i>193.7</i>
<b>Vegetables—</b>							
Leafy, Green and Yellow Vegetables .. .. .	"	(b)	43.2	41.5	41.5	45.8	43.5
Other Fresh Vegetables .. .. .	"	(b)	61.9	58.6	54.7	63.5	67.1
Canned Vegetables .. .. .	"	(b)	4.6	4.9	5.0	6.0	5.2
<i>Total .. .. .</i>	"	<i>(b)</i>	<i>109.7</i>	<i>105.0</i>	<i>101.2</i>	<i>115.3</i>	<i>115.8</i>
<b>Grain Products—</b>							
<b>Flour—</b>							
White .. .. .	"	187.1	181.5	177.9	175.0	179.0	181.2
Sharps .. .. .	"						
Wheatmeal for baking .. .. .	"						
Breakfast Foods .. .. .	"	(i) 10.6	13.0	13.0	13.2	14.5	12.8
Rice (milled) .. .. .	"	4.0	3.7	3.5	3.7	3.7	3.7
Tapioca, Sago, etc. .. .. .	"	1.2	0.4	0.3	0.4	0.3	0.4
Pearl Barley .. .. .	"	1.0	0.5	0.5	0.5	0.5	0.4
Barley Meal and Polished Wheat (Rice substitute) .. .. .	"		0.2	0.2	0.1	0.1	0.1
Edible Starch (Cornflour) .. .. .	"	1.4	1.0	0.9	0.8	0.8	0.6
<i>Total .. .. .</i>	"	<i>205.3</i>	<i>208.7</i>	<i>203.9</i>	<i>201.0</i>	<i>205.8</i>	<i>199.2</i>
<b>Beverages—</b>							
Tea .. .. .	"	6.9	6.8	6.0	5.9	6.2	6.0
Coffee .. .. .	"	0.6	1.1	1.1	1.3	1.6	1.5
Beer .. .. .	Gallon	11.7	23.1	24.3	24.2	22.9	23.0
Wine .. .. .	"	0.6	1.4	1.1	1.1	1.2	1.1

(a) Subject to revision. (b) Not available. (c) Included with fresh meat at its carcass weight. (d) Edible weight. (e) Included with fresh. (f) In terms of weight of shell eggs. (g) Includes fresh equivalent of manufactured products. (h) Probably understated owing to lack of complete data. (i) Excludes invalid and health foods, semolina and wheat germ.

2. **Level of Nutrient Intake.**—The table below shows details of the estimated supplies of nutrients available for consumption in Australia during annual periods since 1952-53 in comparison with the annual average for the three years 1936-37 to 1938-39. The table has been compiled by the Nutrition Section of the Commonwealth Department of Health and is based on the estimates of the quantity of foodstuffs available for consumption per head of population shown in the preceding table.

ESTIMATED SUPPLIES OF NUTRIENTS AVAILABLE FOR CONSUMPTION :  
AUSTRALIA.

(Per Head per Day.)

Nutrient.	Unit.	Average 1936-37 to 1938-39.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58: (a)
Calories .. ..	No.	3,117	3,338	3,296	3,276	3,291	3,307
Protein—							
Animal .. ..	gm.	58.7	57.3	56.8	56.8	59.1	59.3
Vegetable ..	..	30.9	33.8	33.1	31.3	32.5	32.2
Total .. ..	..	89.6	91.1	89.9	88.1	91.6	91.5
Fat .. ..	..	133.5	132.5	133.1	131.4	130.3	131.4
Carbohydrate ..	..	377.4	426.8	416.1	413.9	418.6	419.6
Calcium .. ..	mgm.	642	800	758	782	806	827
Iron .. ..	..	15.4	14.2	13.9	13.2	13.9	13.9
Vitamin A .. ..	I.U.	8,457	7,254	7,084	7,047	7,652	7,937
Ascorbic Acid ..	mgm.	86	90	83	83	89	89
Thiamin .. ..	..	1.4	1.3	1.3	1.2	1.2	1.3
Riboflavin .. ..	..	1.7	1.8	1.7	1.7	1.7	1.8
Niacin .. ..	..	18.7	18.6	18.5	17.6	18.3	18.4

(a) Subject to revision.

NOTE.—The Conversion factors used are based on factors contained in the "Table of Composition of Australian Foods" (Anita Osmond and Winifred Wilson, Canberra, 1954).

## § 4. Patents, Trade Marks and Designs.

1. Patents.—(i) *General.* Patents for inventions are granted under the Patents Act 1952-1955, which applies to the Commonwealth of Australia and the Territories of Norfolk Island, Papua and New Guinea. The Act is administered by a Commissioner of Patents. The principal fees payable up to and including the grant of a patent amount to £17 10s. Renewal fees are payable as follows:—£5 before the expiration of the fourth year, and an amount progressively increasing by £1 before the expiration of each succeeding year up to the final fee of £16, payable before the expiration of the fifteenth year. An extension of time for six months for payment of a renewal fee may be obtained. Patents granted under the repealed Acts (Patents Act 1903-1950) are subject to the renewal fees under those Acts.

(ii) *Summary.* The number of separate inventions in respect of which applications were filed and the number of letters patent sealed during the years 1954 to 1958 are shown in the following table.

## PATENTS : AUSTRALIA.

Particulars.	1954.	1955.	1956.	1957.	1958.
Applications .. ..	9,073	8,869	9,396	9,899	10,511
Applications accompanied by provisional specifications ..	3,590	3,220	3,465	3,683	3,919
Letters patent sealed .. ..	5,464	5,931	6,056	6,407	6,093

2. Trade Marks and Designs.—(i) *Trade Marks.* Under the Trade Marks Act 1955-1958 the Commissioner of Patents is also Registrar of Trade Marks. This Act has replaced the Trade Marks Act 1905-1948.

Provision is made for the registration of users of Trade Marks and for their assignment with or without the goodwill of the business concerned.

A new classification of goods has been adopted and Trade Marks registered under the repealed Acts are reclassified on renewal.

(ii) *Designs.* Under the Designs Act 1906-1950, the Commissioner of Patents is also Registrar of Designs.

(iii) *Summary.* The following table shows the applications for trade marks and designs received and registered during the years 1954 to 1958.

**TRADE MARKS AND DESIGNS : AUSTRALIA.**

Particulars.	1954.	1955.	1956.	1957.	1958.
Trade Marks—					
Received .. ..	4,730	4,630	4,402	4,589	5,331
Registered .. ..	1,400	1,848	5,360	3,569	4,219
Designs—					
Received .. ..	1,373	1,330	1,130	1,394	1,362
Registered .. ..	900	819	458	917	1,758

3. *Revenue.*—Revenue of the Commonwealth Patent, Trade Marks, Design and Copyright Offices for the years 1954 to 1958 was as follows:—1954, £202,290; 1955, £234,125; 1956, £293,918; 1957, £302,279; 1958, £347,659.

**§ 5. Copyright.**

1. *Legislation.*—Copyright is regulated by the Commonwealth Copyright Act 1912-1950 wherein, subject to modifications relating to procedure and remedies, the British Copyright Act of 1911 has been adopted and scheduled to the Australian law.

Reciprocal protection of unpublished works was extended in 1918 to citizens of Australia and of the United States of America, under which copyright may be secured in the latter country by registration at the Library of Congress, Washington. The Commonwealth Government promulgated a further Order in Council which came into operation on 1st February, 1923, and extended the provisions of the Copyright Act to the foreign countries of the Copyright Union, subject to the observance of the conditions contained therein.

2. *Applications and Registrations.*—The following table shows under the various headings the number of applications for copyright received and registered for the years 1954 to 1958.

**COPYRIGHT : AUSTRALIA.**

Particulars.	1954.	1955.	1956.	1957.	1958.
Applications received—					
Literary .. ..	1,044	1,005	1,059	1,064	1,078
Artistic .. ..	25	17	22	38	74
International .. ..	..	..	..	..	..
Applications registered—					
Literary .. ..	943	869	521	870	1,100
Artistic .. ..	20	12	17	26	38
International .. ..	..	..	..	..	..

**§ 6. Australian Shipbuilding Board.**

1. *Constitution.*—Originally established in 1941 under National Security Regulations, the Board has been reconstituted a number of times since its inception and in 1948 was constituted on a permanent basis under the Supply and Development Act. At present, it operates under the control of the Minister for Shipping and Transport. The membership of the Board consists at present of a Chairman, who is the General Manager, a Deputy Chairman, a Finance Member and two other members, one of whom represents the Naval Board.

2. **Functions.**—The existing functions of the Board which have been summarized in earlier issues of the Official Year Book, are set out in detail in regulation 22 (4) of the Supply and Development Regulations.

In the exercise of its functions, the Board is responsible for—(i) the design of vessels; (ii) the calling of tenders and placement of orders; (iii) co-ordination of the Board's supplies to shipbuilders, e.g., machinery and certain equipment; (iv) supervision of construction; (v) acceptance of vessels after sea trials; and (vi) administration associated with ship repairs, marine engines, spare parts, etc.

The Board is also responsible for recommending, within the limits prescribed by the Commonwealth Government, the amount of subsidy to be paid on merchant ships constructed in Australia. In April 1956, the Government accepted a recommendation made by the Tariff Board that the maximum subsidy on ships built in Australia for the coastal trade should be increased from 25 per cent. to 33½ per cent. of the cost of construction. The method and level of assistance to the industry was again re-examined by the Tariff Board following the public hearings during November and December, 1958, but as yet no recommendations have been made.

In order to take advantage of this, private shipowners are required to place their orders for vessels through the Board, which has thus become the ordering authority for all vessels built in Australian yards on which a subsidy is paid.

The Board has also undertaken the preparation of plans and drawings for most of the yards, as the level of ship construction in Australia does not warrant each yard employing specialists in naval architecture. In this way, the Board has assisted in raising the efficiency of the industry as a whole and also in the development of individual yards. (For a more detailed reference to the constitution and functions of the Board see Official Year Book No. 37, p. 1170).

In order to assist the shipbuilding industry to become more self-sufficient, the Board has also encouraged the construction of marine engines in Australia including steam engines and several well known types of diesel engines manufactured under licence. The larger marine diesel engines under construction at 21st April, 1959, were all of the "Doxford" type, one engine being of 3,200 b.h.p. and two of 4,400 b.h.p.

3. **Construction Programme.**—From its inception to 21st April, 1959, the Board had arranged for the construction of 61 vessels of over 300 gross tons and totalling 358,638 tons deadweight. During the war, the Board was also responsible for the construction of numerous small craft and a 1,000 ton floating dock.

Current orders at 21st April, 1959, placed by the Board, were for the construction of 10 vessels totalling 119,200 deadweight tons. The vessels consisted of one 32,250 d.w.t. oil tanker on behalf of Ampol Petroleum Ltd., two bulk ore carriers each of 19,000 d.w.t. on behalf of the Broken Hill Pty. Co. Ltd., one 5,200 d.w.t. bulk sugar carrier on behalf of the Adelaide Steamship Co. Ltd., one 2,500 d.w.t. passenger/cargo vessel for the State Shipping Service of Western Australia together with two bulk carriers of 14,000 d.w.t. each, one bulk carrier of 10,000 d.w.t. one passenger/vehicular ferry of 1,500 d.w.t. and one roll-on roll-off cargo ferry of 1,750 d.w.t. all for the Australian National Line.

## § 7. Commonwealth Scientific and Industrial Research Organization.

1. **General.**—By the Science and Industry Research Act 1949, the previously existing Commonwealth Council for Scientific and Industrial Research was re-organized under the title of the Commonwealth Scientific and Industrial Research Organization. An account of the organization and work of the former Council, and of the earlier Commonwealth Institute of Science and Industry from which the Council was formed, was given in earlier issues of the Official Year Book. (See No. 14, p. 1061 and No. 37, p. 1183.)

2. **Science and Industry Research Act 1949.**—This Act provides for—

- (a) an Executive of the Organization consisting of five members to be appointed by the Governor-General, at least three of whom shall be persons possessing scientific qualifications; and
- (b) an Advisory Council of the Organization, consisting of the members of the Executive, the Chairman of each State Committee constituted under the Act, and such other members as the Advisory Council, with the consent of the Minister, co-opts by reason of their scientific knowledge.

The powers and functions of the Organization are as follows:—(a) To initiate and carry out scientific research in connexion with primary or secondary industries in Australia; (b) to train research workers and to establish industrial research studentships and fellowships; (c) to make grants in aid of pure scientific research; (d) to establish and make grants to industrial research associations in any industry; (e) to test and standardize scientific apparatus and instruments; (f) to collect and disseminate scientific and technical information; (g) to publish scientific and technical reports and periodicals; and (h) to act as a means of liaison between Australia and other countries in matters of scientific research.

**3. Science and Industry Endowment Act 1926-1949.**—Under this Act, the Government established a fund of £100,000, the income from which is used to provide assistance (a) to persons engaged in scientific research; and (b) in the training of students in scientific research. Provision is made for gifts or bequests to the fund which is controlled by a trust consisting of the Executive of the Organization. In accordance with the Act, arrangements have been made to send a number of qualified graduates abroad for training in special fields of work.

**4. Work of the Organization.**—The activities of the Commonwealth Scientific and Industrial Research Organization have necessitated a widespread and adaptable arrangement of its research laboratories. Undesirable centralization has been avoided mainly in two ways. In the first place, the policy has been followed of establishing laboratories in different places in the Commonwealth wherever the necessary facilities, contacts and other suitable conditions could best be found. Secondly, the Act provides for the establishment of a State Committee in each of the six States. These Committees are widely representative of scientific and industrial interests, and advise the Executive or the Advisory Council on general matters and on particular questions of investigation and research.

For about twelve years after its establishment, the work of the previous Council was devoted mainly to the solution of problems affecting the agricultural and pastoral industries. Unlike manufacturing concerns, which can often employ their own scientific staffs, the farmers and the pastoralists are dependent on outside help for the solution of their problems which require research. It was a recognition of the greater need of the primary producer which directed the Council's early policy. In 1937, however, the Commonwealth Government decided to extend the activities of the C.S.I.R. so as to provide assistance to secondary industries, and several laboratories have been established for work in that field; it was thus in the fortunate position of being able to render to these industries assistance of vital importance almost immediately after the outbreak of war. In fact, the remarkable technological advances and developments in secondary industrial production during the war would have been to a large extent impossible had it not been for the assistance rendered by scientific research, and this may well serve as a forceful illustration of what may be accomplished in times of peace.

For the purpose of carrying out its research work, there are established within the Organization a number of Divisions and Sections. The Divisions, of which there are now twenty, comprise the major establishments for which special laboratory buildings have been erected and equipped; the Sections generally include establishments which have not reached a stage of development, so far as the scope and magnitude of their operations are concerned, to justify their designation as Divisions. As the Organization's investigations extend on a Commonwealth-wide basis and as many of the investigations which are being conducted—particularly those concerned with problems affecting the agricultural and pastoral industries—necessitate experimental work in the field, a number of field stations are established in various parts of Australia.

The Divisions which have been established are as follows:—

- Plant Industry, with main laboratories at Canberra and Brisbane and field stations.
- Entomology, with main laboratories at Canberra and field stations.
- Animal Health and Production with main laboratories in Melbourne, Sydney and Brisbane and field stations.
- Biochemistry and General Nutrition, with main laboratories at Adelaide and field stations.
- Soils, with main laboratories at Adelaide and extensive operations in the field.
- Forest Products, with main laboratories in Melbourne and field experiments.
- Food Preservation and Transport, with main laboratories at Homebush (New South Wales) and a subsidiary laboratory in Brisbane.
- Fisheries and Oceanography, with main laboratories at Cronulla (New South Wales), subsidiary laboratory at Thursday Island, and experimental work in coastal waters of Australia.

Metrology, Physics and Electrotechnology, comprising the National Standards Laboratory at Sydney.

Radiophysics, with main laboratory at Sydney.

Physical Chemistry and Chemical Physics, which together with the Sections of Organic Chemistry, Minerals Utilization, Cement and Ceramics and Chemical Engineering, comprise the Chemical Research Laboratories in Melbourne.

Tribophysics, with laboratories in Melbourne.

Building Research, with laboratories in Melbourne.

Mathematical Statistics, with main laboratory in Adelaide.

Meteorological Physics, with main laboratory in Melbourne and field station.

Land Research and Regional Survey, with headquarters in Canberra, and field stations at Alice Springs and Katherine (Northern Territory) and Ivanhoe (Kimberley, Western Australia).

Protein Chemistry (Melbourne), Textile Industry (Geelong, Victoria) and Textile Physics (Sydney), which together comprise the Wool Research Laboratories.

The following are the Sections:—

Commonwealth Research Station, Murray Irrigation Area, Merbein (Victoria).

Irrigation Research Station Griffith (New South Wales).

Upper Atmosphere, with laboratory at Camden (New South Wales).

Dairy Research, Melbourne.

Mineragraphic Investigations, Melbourne.

Ore-dressing Investigations, Melbourne and Kalgoorlie.

Fodder Conservation, Melbourne.

Physical Metallurgy, Melbourne.

Wool Textile Research Laboratories, Geelong, Melbourne and Sydney.

Coal Research, Sydney.

Mathematical Instruments, Sydney.

Wildlife Survey, with main laboratory in Canberra, subsidiary laboratory at Albury, and field experiments.

Soil Mechanics, Melbourne.

Animal Genetics, Sydney.

Engineering, Melbourne.

Agricultural Research Liaison Section, Melbourne.

Industrial Research Liaison Section, Melbourne.

Editorial and Publications Section, Melbourne.

In addition to its investigational work, the Organization deals with inquiries covering a wide range of scientific and technical subjects and maintains Scientific Research Liaison Offices in London and Washington.

An Agricultural Research Liaison Section established at the Organization's Head Office assists in making results in agricultural research speedily available to State Departments of Agriculture for use in their extension work.

Recently an Industrial Research Liaison Section has also been established at Head Office to foster liaison in the secondary and manufacturing fields.

The Organization's Head Office, with administrative and executive staff, is in Melbourne, and associated with it are the Organization's Central Library, Agricultural Research Liaison Section, Industrial Research Liaison Section and Editorial and Publications Section. The funds for the Organization are provided from two main sources, namely, from Commonwealth revenue by Parliamentary appropriation, and from industry directly or indirectly by way of contributions and special grants. The fact that contributions and grants account for over one-eighth of the total annual expenditure indicates that the C.S.I.R.O. has succeeded in a very large measure in gaining the confidence of the public.

The activities of the C.S.I.R.O. are now so comprehensive in their scope and so widely distributed that it is not an easy matter to present an adequate picture of them in a concise form. For details of the investigations in progress, reference should be made to the Annual Report of the Organization.

## § 8. Mount Stromlo Observatory.

1. **General.**—In January, 1957, the former Commonwealth Observatory was transferred from the control of the Department of the Interior to the Australian National University as part of the Research School of Physical Sciences of that University, and is now officially known as the Mount Stromlo Observatory.

2. **Foundation of Observatory.**—The Observatory was founded primarily to prosecute astrophysical research, including the study of the relations between solar and terrestrial phenomena. A short history of the foundation of the Observatory appears in Official Year Book No. 19, p. 979.

3. **Site of Observatory.**—The Observatory is situated on Mount Stromlo, which forms part of a ridge of hills about seven miles west of Canberra. The highest point in the ridge is 2,560 feet above sea level, that is, about 700 feet above the general level of the surrounding country.

4. **Equipment.**—The major items of equipment at Mount Stromlo comprise a 74-inch reflector, a 50-inch reflector, which is the re-built Melbourne 48-inch telescope, a 30-inch reflector donated by the late J. H. Reynolds, Esq., a 20-inch reflector once the property of the late J. H. Catts, M.P., as well as a 9-inch refractor, an 8-inch Schmidt camera and other smaller telescopes. A photographic refractor of 26-inch aperture belonging to the Universities of Yale and Columbia is installed in a dome provided by the Commonwealth Government, and a 20-inch/26-inch Schmidt telescope from the University of Uppsala has been installed in a similar fashion.

5. **Functions of Observatory.**—In recent years, the emphasis has been placed on research relating to our Milky Way System; including star clusters and gaseous nebulae, the Magellanic Clouds, spectroscopic studies of stellar motions and astrophysical studies of Southern Stars. The Observatory is responsible for the accuracy of the Australian Time Service. Considerable attention is being given to the development of this work, and a highly accurate quartz clock system has been installed. A photographic zenith tube has been acquired for time determination. The Observatory issues a descriptive booklet at a cost of 3s. a copy. The Observatory is open to visitors every afternoon at 3 p.m., and upon special written application, visits at night may be arranged for certain set nights.

6. **International Co-operation.**—The Observatory works in close liaison with oversea observatories and major equipment has been, or is being, installed at Mount Stromlo in co-operation with the University Observatories of Yale and Columbia (U.S.A.) and Uppsala (Sweden).

## § 9. Standards Association of Australia.

The Standards Association of Australia is the national standardizing organization of Australia, and issues Australian standard specifications for materials and codes of practice.

The Association was established in July, 1929, by the amalgamation of the Australian Commonwealth Engineering Standards Association and the Australian Commonwealth Association of Simplified Practice. It is an independent body in close touch with modern industrial requirements and has the full recognition and support of the Commonwealth and State Governments and industry. It was incorporated by Royal Charter in 1950.

The sole executive authority of the Association is vested in the Council, on which industry is fully represented, together with official representatives of the Commonwealth and State Governments and their technical departments, and of scientific, professional and commercial organizations. Voluntary assistance is rendered in the drafting of specifications and codes by several thousand individuals who are experts in their particular fields, and are organized into some hundreds of committees. These committees are grouped under broad industry headings including civil engineering and building construction, mechanical engineering, electrical engineering, chemical industry, timber industry, transportation, aircraft materials, ferrous and non-ferrous metallurgy, textiles, mining, ceramics, medical and dental materials, household and domestic economy, miscellaneous and general.

These committees are comprised of nominated representatives of manufacturing, distributing and purchasing organizations, and of scientific and other expert authorities in the particular field of the project being dealt with. The operations of these committees are co-ordinated and supervised by committees broadly representative of the whole industry within which the respective projects are included.

The specifications of the Association provide a suitable standard of performance, quality and dimension and an equitable basis for tendering. They help to eliminate redundant qualities and sizes. They enable purchasers to obtain their requirements with greater assurance of satisfaction, with more rapid delivery and without the necessity of drafting individual specifications.

The underlying principles covering the preparation of the specifications and codes are that they shall be in accordance with the needs of industry; that the common interests of producer and consumer be maintained; that periodical revision should keep the work abreast with progress; and that standardization be arrived at by general consent without coercion.

Organizations, companies, firms and individuals interested in the work of the Association are eligible for subscription membership. Members are entitled to free copies of the publications of the Association and to the use of the library and its Special Information Service. Bibliographical research is undertaken for committees, members of the Association, and industry in general. Many hundreds of inquiries are answered each year.

The Association has international affiliations and the standards of all British and foreign countries are filed in the library and are accessible to members. It is a member, representing Australia, of the International Organization for Standardization (ISO). The Association also administers the Australian National Committees of the International Electrotechnical Commission and the International Commission on Large Dams.

The Association is also the representative of the British Standards Institution, and all British standards may be purchased from headquarters and branch offices in the various States.

The headquarters of the Association are at Science House, Gloucester Street, Sydney, and branches of the Association are situated at Temple Court, 422 Collins Street, Melbourne; School of Arts Building, 166 Ann Street, Brisbane; Alliance Building, Grenfell Street, Adelaide; 10 Hooper Street, West Perth; c/o Engineering Department, Hobart Technical College, Hobart; Department of Works, Canberra; and Howard Smith Chambers, Watt Street, Newcastle.

## § 10. Film Censorship Board.

1. **Legislation.**—The Commonwealth Government's powers over censorship of films extend only to imported films and imported advertising matter and stem from the Customs Act. Under that Act, the Customs (Cinematograph Films) Regulations provide for the appointment of a Film Censorship Board whose function is to ensure that films coming within certain defined categories are not admitted into Australia. Under those regulations, the Film Censorship Board may pass films in their original form, reject them, or pass them after eliminations have been made. The Commonwealth Regulations give the Board no power to classify films.

However, legislation passed by the State Governments of Victoria, Queensland, Western Australia and Tasmania names the Commonwealth Film Censorship Board as the censorship authority and vests in it the power to classify films as suitable for general exhibition or otherwise. The classification is advisory only and is designed to enable picture goers and particularly parents to obtain a general idea of any particular film.

The State Acts give the Commonwealth Board the authority to censor films made in Australia for commercial exhibition and advertising matter made in Australia.

The Censorship organization comprises a Censorship Board of five persons and an Appeal Censor, the headquarters being in Sydney. There is also a right of appeal to the Minister.

2. **Import of Films.**—(a) *35mm. Films for Exhibition in Motion Picture Theatres.* In 1958, 1,224 films comprising 4,500,304 feet were censored. This represents approximately 803 hours screening time. 535 of these films originated in United States of America, 423 in United Kingdom, and 266 in other countries. Of the last mentioned, Italy 32, France 35, U.S.S.R. 61, Greece 35, and Germany 13, were the principal suppliers.

Included in the above were 463 full length feature films which constitute the main theatrical attractions. This was a decrease of 22 compared with the imports for 1957. Feature films came from United States of America 260, United Kingdom 111, and from Other Countries 92, chiefly Italy 16, France 16, Greece 15, and U.S.S.R. 10.

Fourteen feature films were rejected. Cuts were made from 225 feature films mainly because of excessive violence.

Feature films classified as suitable for general exhibition numbered 250 and 214 were not suitable for children. Of the latter, 35 carry the special condition that all advertising shall indicate that they are suitable only for adults.

In addition to the above imported films, 261 35mm. films of 203,492 feet produced in Australia were cleared. These were mainly newsreels and documentaries and concerned the Board only when intended for commercial exhibition or export. This figure does not represent the total production in Australia.

(b) *16mm. Films.* The use of 16mm. films on television programmes has given this type of film a new and significant importance from the censorship standpoint.

In the past, 16mm. films were largely confined to those commercially produced for use in certain country picture theatres, in theatrettes used by business undertakings for advertising and instructional purposes, in churches, schools and universities, and on home movies. These are of all types—dramatic, scenic, topical, medical, advertising, educational, religious, etc.

4,072 films of this type totalling 3,437,479 feet were examined. Two were rejected and eliminations were made from 44.

16mm. films imported for television are dealt with below (*see para. (d)*).

(c) *8mm. and 9.5mm. Films.* The Board's responsibilities in regard to these have been removed to a large extent following the decision to discontinue the censorship of films brought in by travellers depicting incidents during their travels. Periodical checks are not made and only commercially produced films are examined. Of these, 26,791 feet were censored. One was rejected and eliminations made from 3.

(d) *Television Films.* 10,526 16mm. films of 8,265,783 feet and 128 35mm. films of 332,755 feet for use on television were censored.

The number of films is not a true indication of volume because many of these were of very short duration. The footage, however, transposed to a time factor shows that the screening time of films censored for television amounted to approximately 3,826 hours.

The footage of television films—35mm. and 16mm. combined according to Countries of Origin was:—

	Feet.	Per Cent.
United States of America .. ..	7,283,311	84.70
United Kingdom .. ..	954,258	11.09
Other Oversea Countries .. ..	353,474	4.12
Australia .. ..	7,495	0.09
<b>Total .. ..</b>	<b>8,598,538</b>	<b>100.00</b>

50 television films were rejected and eliminations made from 1,343. There were no appeals.

(e) *Foreign Films.* Countries other than United Kingdom and United States of America supplied 266 of the 35mm. films imported for theatrical exhibition. Of these, 92 were feature films.

The dialogue generally is in a foreign language usually with explanatory English captions. A few have an English commentary, and in isolated cases the dialogue is turned into English by the process known as "dubbing". The main countries of origin are shown above (*see para (a)*).

The following table shows the average imports of feature films from United States of America, United Kingdom and Foreign Countries during the three years 1948-50 with those for 1955-57:

	Average 1948-50.	Average 1955-57.
United States of America .. ..	289 (75½%)	253 (57%)
United Kingdom .. ..	73 (19%)	104 (23½%)
Foreign .. ..	21 (5½%)	86 (19½%)

Of 4,072 16mm. commercial films censored, 762 were of foreign origin. The chief supplying countries were France, 86; Germany, 89; Czechoslovakia, 90; India, 83; Malaya, 26; Holland, 58; Italy, 58; Switzerland, 130; and U.S.S.R., 23.

Foreign films comprised only 18.7 per cent. of the films brought in for television.

An interpreter attends all censor screenings of films in a foreign language.

3. *Export of Films.*—The quantity of films exported for the year 1958 was 1,670,522 feet, of which 1,116,327 feet were sent to British countries, including Trust Territories, 179,644 feet were sent to the United States of America and 374,551 feet to other countries. This footage includes, in many cases, several prints of the one film.

### § 11. Australian National Film Board and the Film Division.

1. **The Australian National Film Board.**—The Australian National Film Board was inaugurated in April, 1945, on the recommendations of a Commonwealth Government inter-departmental committee which considered the suggestions of a conference of interested individuals and Commonwealth and State officials, including Directors of Education, called in November, 1944, by the Ministers for Information and Post-war Reconstruction. It was attached, for administrative purposes, to the Department of Information.

With the abolition of the Department of Information in March, 1950, administration of the Board was transferred to the News and Information Bureau, Department of the Interior.

In November, 1950, the Board was reconstituted as an advisory body to the Minister for the Interior on matters concerned with the production, acquisition and distribution of films required by Commonwealth departments for the following purposes:—

- (a) for use within Australia on important matters of national interest and welfare, such as school and adult education, rehabilitation, social development, international understanding, trade and tourist expansion, and immigration;
- (b) for dissemination abroad to expand trade and commerce with other countries, to encourage tourist traffic with Australia, to improve Australia's relations with other countries and, where necessary, to explain Australia's national policies and encourage immigration.

The constitution provides for a membership of ten, with the Secretary of the Department of the Interior, Chairman, the Director of the News and Information Bureau, Deputy Chairman, and the remainder representative of Commonwealth departments, State Government instrumentalities and organizations interested in the production, distribution or utilization of films for national publicity.

2. **The Film Division of the News and Information Bureau.**—Production and distribution of all films required by Commonwealth Departments is undertaken by the staff of the Film Division, News and Information Bureau, Department of the Interior, or by commercial enterprises under the supervision of officers of the Film Division. Theatrical distribution in Australia, and both theatrical and non-theatrical distribution overseas, of all Film Division productions are organized by the News and Information Bureau's home office or its oversea representatives. Non-theatrical distribution in Australia is organized through the National Library, Canberra, in co-operation with State film distribution agencies.

The first Australian Government organization for the production of motion pictures for national publicity purposes was the Cinema and Photographic Branch of the Department of Commerce, set up in Melbourne in 1920. Early in the 1939–45 War, the newly-established Department of Information was made responsible for the operation of the Cinema Branch and for an Official War Photography Unit.

Since 1946, the Film Division has produced 328 films for general exhibition, as well as training and special purpose films. Prints are dispatched to 44 oversea centres, where distribution is arranged by News and Information Bureau officers or other Australian representatives. In Britain, there is regular distribution through more than a thousand theatres, and a large non-theatrical and educational series of circuits. By arrangement with the British Broadcasting Corporation, items of topical interest photographed by the Film Division are flown to London for television. In the United States of America, there is wide non-theatrical distribution and considerable use of the films by television networks. An exchange arrangement with the National Film Board of Canada secures extensive distribution in Canada. French versions, prepared in Paris under the supervision of the Australian Embassy, circulate through France and French-speaking countries. Selected films have also been recorded in Dutch, German, Italian, Japanese, Hindustani, Tamil and other Indian dialects.

In addition to films made on the initiative of the News and Information Bureau, the Film Division has produced, or is producing, films under the sponsorship of, or with the co-operation of, Commonwealth Departments and many other bodies such as the Commonwealth Bank of Australia, the Road Safety Council, Overseas Telecommunications Commission, Snowy Mountains Hydro-electric Authority, Australian Wine Board, the Australian National University and the Australian Broadcasting Commission.

The co-operation of the Australian motion picture industry with the Commonwealth, spontaneously offered at the outset of the 1939–45 War, continues. Special films for urgent national appeals are planned, produced and distributed, with the assistance of the National Films Council of the motion picture industry and its Film Production Advisory Committee.

§ 12. National Safety Council of Australia.

The National Safety Council of Australia was founded in Melbourne in 1927 for the purpose of developing, mainly by means of education, safety on the road, at work and in the home, and its activities have developed in other directions wherever the need for reducing the toll of accidents has been shown. To this end, it conducts continuous propaganda through the press and in other ways. It also forms Junior Safety Councils in the schools for developing a safety conscience among children. Posters are available to schools in connexion with Health and Safety lessons. Specially taken films are available for child and adult road safety instruction.

A "Safe Driving" campaign for individual motor drivers is conducted as well as a "Freedom from Accidents" competition among employee drivers, those completing a year free from any accident for which they were responsible being given a certificate to that effect. An industrial service of four posters a month, together with slips for pay envelopes, and the Council's bi-monthly journal "Safety News", constitutes a regular service for the dissemination of safety advice, which is supplied on a membership basis to factories each year. Committees deal with specific problems regarding traffic, films, safety in industry, air safety and home dangers. The Air Safety Committee has a plan for marking town and property names on buildings to assist aircraft in distress and to facilitate dropping supplies from the air in times of emergency, such as floods.

The Council is supported by Government grants, public subscriptions, and payments for service, and is a non-profit organization. Its work is carried on by a small staff controlled by committees and governed by an executive. Six committees, whose work is of an entirely honorary nature, are in operation, namely, Executive, Traffic, Industrial Safety, Home, Air Safety and Publicity. The Road Safety Division, which handles all Road Safety matters is the Victorian constituent of the Australian Road Safety Council.

§ 13. Australian Road Safety Council.

1. **Origin and Organization.**—The Australian Road Safety Council was formed in June, 1947, through the instrumentality of the Australian Transport Advisory Council.

The prime movers for the establishment of the Council were the Australian Automobile Association, which submitted a comprehensive plan; the New South Wales Minister for Transport, who advocated expansion, on a nation-wide basis, of road safety activities on lines similar to those of the Road Safety Council of New South Wales; and the National Safety Council of South Australia, which conveyed recommendations from a Special Safety Convention held in Adelaide in 1946.

At that time, in addition to the above-mentioned organizations in New South Wales and South Australia, there were road safety organizations in Victoria and Western Australia. Steps were immediately taken to form Councils in Queensland and Tasmania, and subsequently in the Australian Capital Territory.

The Australian Road Safety Council is the composite body of Road Safety Councils of the following States and Territories of Australia:—

*Governmental.*—New South Wales, Road Safety Council of New South Wales; Queensland, Road Safety Council of Queensland; Tasmania, Road Safety Council of Tasmania; the Australian Capital Territory, Road Safety Council of the Australian Capital Territory.

*Non-Governmental.*—Victoria, Road Safety Division, National Safety Council of Australia; South Australia, Road Safety Division, National Safety Council of South Australia; Western Australia, Road Safety Division, National Safety Council of Western Australia.

The Council is representative, geographically and technically, of the whole Commonwealth and comprises nominees of practically all classes of road users, together with representatives of road transport, the Department of Army (representing all Services) and police administrations from each State. National organizations represented on the Council are:—Australian Automobile Association, Australian Road Transport Federation, Auto Cycle Council of Australia, Council of Fire and Accident Underwriters, The Federal Chamber of Automotive Industries, Federation of Motor Cycle Importers and Distributors of Australia, and Transport Workers' Union of Australia.

The Council meets annually and an Executive Committee operates between conferences. The principal effort of the Council is directed through educational, advertising and public relations media.

An annual grant is made available by the Commonwealth Government under the Commonwealth Aid Roads Act for the promotion of road safety. Hitherto £100,000 annually, it was increased to £150,000 for the four years commencing 1st July, 1955. Of this, £90,000 is allocated to State Road Safety Councils for local activities in the following proportions:—New South Wales, £22,500; Victoria, £18,000; Queensland, £16,650; Western Australia, £14,850; South Australia, £11,250; and Tasmania, £6,750. The remaining £60,000 is applied to the National Campaign, spread over the entire Commonwealth.

**2. Mode of Operation.**—The role of the Australian Road Safety Council is primarily in the field of education and public relations. Its task is to inculcate the habit of safe use of the roads by all who travel on them and to promote the cause of road safety as a humanitarian and community ideal of the highest importance. To this end, it constantly strives to increase public awareness of the road accident problem, which for the year ended 30th June, 1958, resulted in 39,473 accidents, causing the deaths of 2,146 persons and injuries to another 52,213 persons. (For further information on the subject of Traffic Accidents see pp. 538–41).

The campaign for road accident prevention resolves broadly into two main elements relating to (i) Road Users and (ii) Roads and Vehicles. The attack falls into three main divisions—(i) Education, (ii) Enforcement, and (iii) Engineering. The link between the components is, broadly:—

Road Users	..	{ Education (public relations media, instruction in schools, homes, etc.). Enforcement (of correct road usage—through the police and the courts, uniform traffic laws, etc.).
Roads and Vehicles	..	
	..	{ Engineering (technical improvements of all kinds, safer roads and vehicles, improved illumination, uniform vehicle standards, etc.).

In addition to the foregoing activities, the Council convenes special national conferences, as required by the Australian Transport Advisory Council, to consider specific road safety problems. Typical of these have been the special committee appointed in 1951 to discuss level crossing accidents, which recommended, among other measures, the appointment in each State of a committee to investigate level crossings and report on safety provisions, the elimination of some railway level crossings and the closure of others where practicable and desirable; a special meeting held in June, 1953, to discuss methods of reducing the high incidence of motor cycle accidents, at which various measures to offset the greater vulnerability of both the machine and its rider were recommended; and special meetings held in May, 1954, and April, 1955, to consider the problems of "Youth and Road Safety" and "Pedestrian Behaviour" respectively. Road safety and traffic authorities from overseas countries took part in special "International Sessions" of the 1956 Congress of the Council. The Australian Road Safety Council has pioneered the advocacy of voluntary blood tests for intoxication in cases of suspected driving under the influence of drugs or alcohol. An Educational-Enforcement campaign to link more closely the work of the road safety movement and the police was launched in all States and the A.C.T. during 1958 and 1959.

The Council works in close collaboration with two other bodies also established by the Australian Transport Advisory Council, namely, the Australian Motor Vehicle Standards Committee and the Australian Road Traffic Code Committee. All three bodies are administered by the Commonwealth Department of Shipping and Transport, which is the executive department for the Australian Transport Advisory Council.

The Australian Motor Vehicle Standards Committee develops and promulgates essential basic motor vehicle standards such as maximum lengths, weights, heights, carrying capacity of vehicles, and minimum lighting, braking and other mechanical efficiencies. In addition to ensuring a greater safety factor, these standards have helped to eliminate many conflicting State requirements which had an adverse effect on design and production costs.

The Australian Road Traffic Code Committee is charged with the responsibility of progressively preparing a "blue print" uniform national traffic code for incorporation in State legislation. Speed limits, right-hand turns, rules governing approaches to intersections, qualifications of drivers, and pedestrian behaviour are a few of the numerous aspects which come within its purview, and a high degree of uniformity has been achieved.

#### § 14. Australian Atomic Energy Commission.

In November, 1952, a Commission of three members was appointed to control the Commonwealth's activities in relation to uranium and atomic energy, and in April, 1953, upon the enactment of the Atomic Energy Act 1953, the Commission was established as a statutory authority, with powers and functions as defined in the Act. Under amending legislation, the number of Commissioners was increased to five in April, 1958. The Commission is a corporate and autonomous body, controlling its own service. It functions under the direction of the Minister for National Development.

The functions of the Commission fall under two main headings. Firstly, it is responsible for undertaking and encouraging the search for and mining of uranium, and is empowered to co-operate with the appropriate authorities of the States in connexion with these and related matters. Secondly, it is authorized to develop the practical uses of atomic energy by constructing and operating plant for this purpose, carrying out research and generally fostering the advancement of atomic energy technology. These powers and functions are set out in detail in Part II. of the 1953 Act. In general, and subject to the Commonwealth's defence powers and particular provisions of the Act, they are exercisable only in or in relation to the Territories of the Commonwealth.

The search for and mining of uranium in the Territories of the Commonwealth are freely open to private enterprise, subject to the Atomic Energy Act 1953 and the Ordinances of the Territories. For the assistance of private prospectors, and with the object of ascertaining the uranium resources of the Territories, aerial and geological surveys are carried out to identify areas favourable to uranium occurrences. These surveys are undertaken for the Commission by the Bureau of Mineral Resources of the Department of National Development, and the results are published from time to time in map form for general information. As incentives to private enterprise to engage in the search for uranium, rewards have been paid for discoveries. Taxation concessions are allowed in respect of income derived from uranium mining. In addition, the Atomic Energy Commission, the Bureau of Mineral Resources and other Commonwealth agencies provide prospectors and mining companies with a wide range of technical and advisory services.

The development of the uranium resources of the States is governed by the legislation and policies of the States. Commonwealth aerial survey facilities are made available to the States for the radiometric examination of areas within the States, and the State Mines Departments undertake work, for the Commonwealth, on the testing of uranium ores and research on ore treatment problems.

Uranium oxide is being produced in Australia from large ore deposits at Rum Jungle and South Alligator River in the Northern Territory, Radium Hill in South Australia, and Mary Kathleen in Queensland. The Rum Jungle deposits have been developed under arrangements between the Commonwealth and the Combined Development Agency, a joint procurement organization of the United States and United Kingdom Governments. The actual mining and treatment operations are being conducted for the Commonwealth by an Australian mining company. A treatment plant was brought into operation on the field in September, 1954, the substantial production from which is being sold to the Agency for defence purposes. The Radium Hill deposits are being developed by the South Australian Government, which has established an ore concentration plant on the field and a plant for the treatment of the concentrates at Port Pirie. Like the Rum Jungle project, the operations at Radium Hill and Port Pirie are carried out under arrangements with the Combined Development Agency, and the output from the operations is sold to the Agency.

The Mary Kathleen lease, containing a large body of ore, is being developed by commercial interests, which have established a mine treatment plant and township in the area at a cost of more than £10 million. Production from the plant is being sold to the United Kingdom Atomic Energy Authority, under arrangements approved by the Commonwealth Government. Two other companies in the South Alligator River region have also entered into contracts with the Authority for smaller tonnages. One of these has commenced production and the other is expected to start production in September, 1959.

The Commission Acts as agent for the Commonwealth Government in buying and stockpiling monazite and beryl for the future requirements of Australia's atomic energy programme.

The Commission has undertaken a research programme into the civil uses of atomic energy, with special reference to Australian needs. By arrangement with the United Kingdom Atomic Energy Authority, it has had a team of scientists working in the Authority's Research Establishment at Harwell in England. At the end of 1955, the Commission began

the construction of its Research Establishment at Lucas Heights near Sydney. This consists of a high flux nuclear reactor of the most advanced type, with associated services and various laboratories. During 1958, the reactor came into operation and the scientific staff, with one or two exceptions, continued their research programme in Australia. So that the specialized facilities at Lucas Heights may be available to the universities for research and training, the Australian Institute of Nuclear Science and Engineering has been established. This is a joint venture of the Commission and the Australian universities. Within Australia, in addition to its programme at Lucas Heights, the Commission is supporting atomic energy research on a considerable scale in the various universities, and it has established a wide range of post-graduate studentships in the universities to train scientists for future work in atomic energy fields.

The broad objects of the Commission's research programme are to develop the production of electric power from nuclear fuels, and to investigate and promote the application of atomic energy and radioactive isotopes in industry, agriculture, medicine and biological research and other fields. In these endeavours, the Atomic Energy Commission is working in close co-operation with the United Kingdom Atomic Energy Authority, under arrangements which give Australia access to the results of United Kingdom research on peaceful atomic energy uses. The results of research in Australia will in like manner be made available to the United Kingdom. Work in Australia, though constituting a self-contained programme, is co-ordinated with the United Kingdom programme, to avoid overlapping of research objectives and duplication of investigations. Australia also has bilateral agreements with the United States and Canada, and is taking part in the promotion of peaceful uses of atomic energy through the International Atomic Energy Agency.

*In the light of the vast amount of research now going forward overseas, and the programmes of many nations for the establishment of full-scale power-producing reactors, it seems clear that nuclear power is rapidly approaching the stage of being economically practicable. The planned Australian research effort will enable Australia to make a full contribution to the advancement of atomic energy technology, both in power production and in other fields, and will, at the same time, place the country in a position to take advantage of the practical uses of atomic energy as they are developed.*

## § 15. The United Nations.

1. **General.**—The Moscow Declaration of 1943 concerning a new international organization for the maintenance of international peace and security marked the end of the League of Nations. The dissolution of the League and the transfer of certain of its functions to the new body, the United Nations, took place over subsequent years. Information concerning the League of Nations was given in issue No. 35 and earlier issues of the Official Year Book.

The Charter of the United Nations was drawn up by the delegates of fifty nations at the United Nations Conference on International Organization at San Francisco from 25th April to 26th June, 1945. Australia's ratification was deposited on 1st November, 1945. Following the admission of 16 new members during the Tenth Session and 17 more subsequently and the replacement of Egypt and Syria by the United Arab Republic, there are now\* 82 member States:—Afghanistan, Albania, Argentina, Australia, Austria, Belgium, Bolivia, Brazil, Bulgaria, Burma, Byelorussia, Cambodia, Canada, Ceylon, Chile, China, Colombia, Costa Rica, Cuba, Czechoslovakia, Denmark, the Dominican Republic, Ecuador, El Salvador, Ethiopia, Finland, France, Ghana, Greece, Guatemala, Guinea, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran, Iraq, the Republic of Ireland, Israel, Italy, Japan, Jordan, Laos, Lebanon, Liberia, Libya, Luxemburg, Malaya, Mexico, Morocco, Nepal, the Netherlands, New Zealand, Nicaragua, Norway, Pakistan, Panama, Paraguay, Peru, the Philippines, Poland, Portugal, Romania, Saudi Arabia, Spain, Sudan, Sweden, Thailand, Tunisia, Turkey, the Ukraine, the Union of South Africa, the Union of Soviet Socialist Republics, the United Arab Republic, the United Kingdom, the United States of America, Uruguay, Venezuela, Yemen and Yugoslavia.

The full record of the Conference is contained in the Report by the Australian Delegates on the United Nations Conference on International Organization held at San Francisco, from 25th April to 26th June, 1945.

At San Francisco, an Executive Committee and a Preparatory Commission were established, and when these bodies had completed their work of preparation for the first meeting of the United Nations, the General Assembly met in London on 10th January, 1946.

\* April, 1959.

The principal organs of the United Nations are the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice, and the Secretariat.

**2. General Assembly.**—This is the forum of the United Nations. In it, each member State is represented and has one vote. It meets in regular annual sessions from the middle of September and has provision for special sessions. With the exception of disputes which are before the Security Council and matters essentially within the domestic jurisdiction of any State, it has power to discuss any matter within the scope of the Charter and to make recommendations upon it. The assembly elects the non-permanent members of the other major organs and considers annual reports from them. Upon the recommendation of the Security Council, it may expel a member which has persistently violated the principles of the Charter.

**3. The Security Council.**—This has the primary responsibility for the maintenance of international peace and security. It is composed of five permanent members, namely China, France, the United Kingdom, the Union of Soviet Socialist Republics and the United States of America, and six non-permanent members with two-year periods of office, of whom three retire at the end of each year. At the initial election three countries, including Australia, were elected for a term of two years and three others for a term of one year only. The following are the non-permanent members of the Security Council at present\*: Canada, Japan and Panama (whose terms commenced on 1st January, 1958), and Argentina, Italy and Tunisia (whose terms commenced on 1st January, 1959). On procedural matters, decisions are taken by an affirmative vote of any seven members, but on all other matters, decisions can be made only on the affirmative vote of seven members, including the concurring votes of all the permanent members. However, the powers which are parties to a dispute for peaceful settlement do not vote.

The Security Council is assisted by a Military Staff Committee consisting of the Chiefs of Staff of the permanent members of the Council or their representatives.

**4. The Economic and Social Council.**—This body consists of eighteen members, each elected for a period of three years. Its main functions are to make, or initiate, studies and reports, and to make recommendations to the General Assembly or to members of the United Nations upon international, economic, social, cultural, educational, health and related matters. It may make recommendations for the purpose of promoting respect for, and observance of, human rights and fundamental freedoms for all.

The present\* members of the Economic and Social Council are: Finland, Mexico, Pakistan, Poland, the United Kingdom, and the Union of Soviet Socialist Republics (retiring 1959); Chile, China, Costa Rica, France, the Netherlands and Cuba (retiring 1960) and Afghanistan, Bulgaria, New Zealand, Spain, the United States of America and Venezuela (retiring 1961).

**5. The Trusteeship Council.**—The Charter declares the political, social, cultural and economic advancement of the Trust Territories to be a sacred trust. A Trusteeship Council has been set up composed of those members of the United Nations who are administering trust territories and an equal number of members who are not administering trust territories (including any permanent members of the Security Council who are not administering trust territories). Territories which may be placed under trusteeship in accord with individual trusteeship agreements are those previously held under mandate, those detached from enemy states as a result of the 1939–45 War and those dependent territories placed under the system by the States responsible for their administration. Australia is automatically a member of the Trusteeship Council, as the power administering the Trust Territories of New Guinea and Nauru. The present\* members of the Trusteeship Council are: Australia, Belgium, France, Italy, New Zealand, the United Kingdom and the United States of America (administering States), and Burma, China, Haiti, India, Paraguay, Syria† and the Union of Soviet Socialist Republics. China and the Union of Soviet Socialist Republics are members of the Trusteeship Council by virtue of their permanent membership of the Security Council.

The Council has among its duties the consideration of annual reports submitted by the trustee States, the carrying out of periodic inspections by agreement with them, and the formulation of questionnaires on the welfare and advancement of the dependent peoples.

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\* April, 1959.

† This seat has been taken over by United Arab Republic.

6. **The International Court of Justice.**—This consists of fifteen judges, no two of whom may be nationals of the same State. Its jurisdiction comprises all cases which the parties refer to it, and all matters especially provided for in the Charter or in treaties and conventions in force. Provision exists in the Statute of the Court whereby States, parties to the Statute, may accept the jurisdiction of the Court as compulsory, either conditionally or unconditionally in certain international disputes.

The present\* members of the Court are: Judges Hackworth (United States of America), Sir Zafrullah Khan (Pakistan), Klaestad (Norway), Kozhevnikov (U.S.S.R.), and Armand-Ugon (Uruguay)—all retiring in 1961; Judges Lauterpacht (United Kingdom), Basdevant (France), Cordova (Mexico), and Quintana (Argentina)—all retiring in 1964; and Judges Badawi (Egypt), Wellington Koo (China), Winiarski (Poland), Sir Percy Spender (Australia) and Spiropoulos (Greece)—all retiring in 1967. The vacancy created by the death of Judge Guerrero (El Salvador) has not yet been filled.

7. **The Secretariat.**—The Secretary-General is the head of the Secretariat of the organization. He is appointed by the General Assembly upon the recommendation of the Security Council, and he appoints his staff in accordance with the rules approved by the General Assembly. Mr. Trygve Lie (Norway) was appointed first Secretary-General, and at the Sixth Session of the General Assembly in 1950 was re-appointed for a further three years as from 1st February, 1951. In November, 1952, Mr. Lie announced his intention of retiring and in April, 1953, Mr. Dag Hammarskjöld (Sweden) was appointed in his place. Mr. Hammarskjöld was re-appointed for a further five years in September, 1957.

8. **Specialized Agencies.**—In addition to these organs of the United Nations, there are specialized agencies which co-operate closely with the United Nations in many fields on economic and social questions.

Those now\* in operation are: The International Labour Organization; Food and Agriculture Organization; United Nations Educational, Scientific and Cultural Organization; International Civil Aviation Organization; International Bank for Reconstruction and Development; International Monetary Fund; Universal Postal Union; World Health Organization; International Telecommunication Union; World Meteorological Organization; Intergovernmental Maritime Consultative Organization.

To enable co-ordination of the work of the specialized agencies, arrangements have been made for them to submit reports on their activities and budgets to the United Nations where they are discussed by the Economic and Social Council and the General Assembly.

## § 16. Australian Representation Abroad : Oversea Representation in Australia.

1. **General.**—The following statements show particulars of the various Australian diplomatic and other representatives overseas and of overseas representatives in Australia at 31st July, 1959. Full details of Commonwealth and foreign representation in Australia—diplomatic and consular—and of permanent Australian missions overseas may be obtained from publications issued by the Department of External Affairs, Canberra. A statement is issued each quarter by the Department of Trade, showing the latest particulars of the Australian Trade Commissioner Service overseas.

### 2. Australian Representation Overseas—

#### AUSTRALIAN DIPLOMATIC AND OTHER REPRESENTATIVES OVERSEAS.

Her Majesty's Australian Ambassador Extraordinary and Plenipotentiary to—

*Brazil* (Rio de Janeiro)—D. Mackinnon, C.B.E.

*Burma* (Rangoon)—A. H. Loomes.

*France* (Paris)—Dr. E. R. Walker, C.B.E.

*Germany, Federal Republic of* (Bonn)—P. Shaw.

*Indonesia* (Djakarta)—L. R. McIntyre, O.B.E.

*Ireland* (Dublin)—(Vacant); N. St. C. Deschamps (Chargé d'Affaires *ad interim*).

*Italy* (Rome)—H. A. McClure-Smith, C.V.O.

*Japan* (Tokyo)—Sir Alan Watt, C.B.E.

*The Netherlands* (The Hague)—Sir Edwin McCarthy, C.B.E.

*The Philippines* (Manila)—A. T. Stirling, C.B.E.

*Thailand* (Bangkok)—J. K. Waller, O.B.E.

*Union of Soviet Socialist Republics* (Moscow)—(Vacant); T. W. Cutts (Chargé d'Affaires *ad interim*).

*United States of America* (Washington, D.C.)—The Hon. Howard Beale, Q.C.

*Viet Nam* (Saigon)—W. D. Forsyth, O.B.E.

\* April, 1959.

**High Commissioners for Australia in—**

*Canada* (Ottawa)—Major-General Sir Walter Cawthorn, C.B., C.I.E., C.B.E.  
*Ceylon* (Colombo)—J. C. G. Kevin.  
*Ghana* (Accra)—S. Jamieson.  
*India* (New Delhi)—W. R. Crocker, C.B.E.  
*Malaya, Federation of* (Kuala Lumpur)—T. K. Critchley.  
*New Zealand* (Wellington)—Vice-Admiral Sir John Collins, K.B.E., C.B.  
*Pakistan* (Karachi)—A. R. Cutler, V.C., C.B.E.  
*Union of South Africa* (Pretoria)—O. L. Davis.  
*United Kingdom of Great Britain and Northern Ireland* (London)—The Rt. Hon. Sir Eric Harrison, K.C.V.O.

**Her Majesty's Australian Envoy Extraordinary and Minister Plenipotentiary to—**

*Cambodia* (Phnom Penh)—F. H. Stuart.  
*Israel* (Tel Aviv)—B. C. Ballard.  
*Laos* (Vientiane)—(Vacant); Miss C. Nelson (Chargé d'Affaires *ad interim*).

**Australian Military Mission—**

*Germany, Federal Republic of* (Berlin)—Head, P. Shaw.

**Australian Mission—**

*United Nations* (New York)—Ambassador, J. Plimsoll, C.B.E.  
*United Nations* (Geneva)—Permanent Representative, L. J. Arnott.

**Australian Commissioner in—**

*Singapore, Brunei, Sarawak and North Borneo* (Singapore)—D. McNicol.

**Consuls-General—**

*Greece* (Athens)—G. V. Greenhalgh.  
*Switzerland* (Geneva)—L. J. Arnott.  
*United States of America* (New York)—The Hon. Sir Josiah Francis.  
*United States of America* (San Francisco)—M. H. Marshall.

**Consuls—**

*Denmark* (Copenhagen)—G. A. Cole.  
*New Caledonia* (Noumea)—R. B. Hodgson.  
*Portugese Timor* (Dili)—F. J. A. Whittaker.  
*United States of America* (New York)—J. E. Ryan.

**Trade Commissioner Service of the Commonwealth of Australia—**

*Canada*—R. R. Ellen (Montreal); C. A. Allen, M.V.O. (Vancouver).  
*Ceylon*—M. F. Roberts (Colombo).  
*France*—A. P. Fleming, O.B.E., Commercial Counsellor and Trade Commissioner (Paris).  
*Germany, Federal Republic of*—R. K. Scott, Commercial Counsellor and Trade Commissioner (Bonn).  
*Hong Kong*—G. R. B. Patterson, Senior Trade Commissioner, R. J. C. Schneeman (Victoria).  
*India*—F. R. Gullick (New Delhi); J. L. Chapman (Calcutta); D. R. McPhee, O.B.E., E.D., (Bombay).  
*Indonesia*—T. W. Collis, Commercial Counsellor and Trade Commissioner (Djakarta).  
*Italy*—H. K. H. Cook, Commercial Counsellor and Trade Commissioner (Rome).  
*Japan*—N. F. Stuart, Commercial Counsellor and Trade Commissioner (Tokyo).  
*Malaya, Federation of*—W. Cairns, Commercial Counsellor and Trade Commissioner (Kuala Lumpur).  
*New Zealand*—H. C. Menzies (Wellington); C. L. Steele (Auckland); D. M. Walker (Christchurch).  
*Pakistan*—R. B. Hines, Commercial Counsellor and Trade Commissioner (Karachi).  
*Philippines, The*—D. L. Crawford, Commercial Counsellor and Trade Commissioner (Manila).  
*Rhodesia and Nyasaland, Federation of*—H. M. LeMarchand (Salisbury).  
*Singapore*—R. W. Holberton, E.D., (Acting) Commercial Counsellor and Trade Commissioner (Singapore).

- Sweden*—W. R. Carney, Senior Trade Commissioner; A. C. Slater (Stockholm).  
*Thailand*—L. C. Holmes, Commercial Councillor and Trade Commissioner (Bangkok).  
*Union of South Africa*—S. D. Shubart, Commercial Councillor and Trade Commissioner (Johannesburg).  
*United Kingdom of Great Britain and Northern Ireland*—P. R. Searcy, Senior Trade Commissioner; A. R. Taysom (London).  
*United States of America*—A. R. Callaghan, Commercial Councillor and Trade Commissioner; R. S. Livingston, Commercial Councillor (Washington); A. J. Day, M.B.E. (New York); K. F. McKernan (San Francisco); E. E. Jarvis (Chicago).  
*West Indies, Federation of*—B. T. Connolly (Port of Spain).

**Australian Government Trade Correspondents—**

- Fiji*—D. E. Morgan (Nadi Airport).  
*Hawaii*—R. K. Wetherell (Honolulu).  
*Kenya*—R. E. Anderson (Nairobi).  
*Mauritius*—J. L. B. Cowan (Curepipe).  
*Mexico*—N. Pelham Wright (Mexico City).  
*South America*—Captain H. Cross (Montevideo Ro Del Uruguay).

3. **Oversea Representation in Australia.**—Consular representatives are not included in the following statement. Particulars of these are contained in a publication *Consular Representatives and Trade Commissioners in Australia*, issued by the Department of External Affairs, Canberra. There are more than 180 such representatives in Australia, and 53 countries are represented.

**DIPLOMATIC REPRESENTATIVES IN AUSTRALIA.**

**Ambassador Extraordinary and Plenipotentiary of—**

- Belgium*—His Excellency Monsieur Willy Stevens (Sydney FB 1325).  
*Brazil*—(Vacant); Senhor L. A. Borges da Fonseca (Chargé d'Affaires *ad interim*) (Canberra X 2680).  
*Burma*—(Vacant); U Than Hi A. (Chargé d'Affaires *ad interim*) (Canberra U 1451).  
*China*—(Vacant); Dr. Chen Tai Chu (Chargé d'Affaires *ad interim*) (Canberra U 2368).  
*France*—His Excellency Monsieur R. Sivan (Canberra X 2925).  
*Germany, Federal Republic of*—His Excellency Dr. Hans Mühlenfeld (Canberra U 1553).  
*Indonesia*—His Excellency Dr. A. Y. Helmi (Canberra U 1221).  
*Ireland*—(Vacant); Mr. William B. Butler (Chargé d'Affaires *ad interim*) (Canberra J 3251).  
*Italy*—His Excellency Signor Eugenio Prato (Canberra J 3263).  
*Japan*—His Excellency Mr. Katsushiro Narita (Canberra U 1251).  
*The Netherlands*—His Excellency Mr. A. H. J. Lovink (Canberra U 1256).  
*The Philippines*—His Excellency Dr. J. F. Imperial (Sydney FL 4168).  
*Thailand*—His Excellency Nai Vadhana Isarabhakdi (Canberra U 8101).  
*United States of America*—His Excellency Mr. William J. Sebald (Canberra U 1351).  
*Union of Soviet Socialist Republics*—His Excellency Mr. I. F. Kwidiukov (Canberra X 1033).

**Envoy Extraordinary and Minister Plenipotentiary of—**

- Austria*—Dr. J. Manz (Chargé d'Affaires) (Canberra U 8167).  
*Cambodia*—His Excellency Mr. Poc Thieu (Canberra X 3523).  
*Denmark*—Mr. F. Henning Hergel, O.B.E. (Chargé d'Affaires) (Sydney BW 3547).  
*Finland*—Mr. T. I. Kala (Chargé d'Affaires) (Sydney FM 3116).  
*Greece*—His Excellency Monsieur G. K. A. Christodulo (Canberra X 1553).  
*Israel*—His Excellency Mr. M. Yuval (Minister designate) (Sydney BW 2082).  
*Sweden*—His Excellency Monsieur Carl Bergenstråhle (Canberra U 1421).  
*Uruguay*—Mr. Washington Rios (Chargé d'Affaires) (Canberra J 2647).

**High Commissioner for—**

*Canada*—His Excellency Mr. T. W. L. MacDermot (Canberra U 1304).

*Ceylon*—His Excellency Mr. B. F. Perera, C.M.G., O.B.E. (Canberra X 1021).

*India*—(Vacant); Shri J. C. Ajmani, Acting High Commissioner (Canberra J 3209).

*Malay, Federation of*—His Excellency Dato' Gunn Lay Teik, O.B.E. (Canberra X 1277).

*New Zealand*—His Excellency the Hon. F. Jones (Canberra U 1030).

*Pakistan*—(Vacant); Mr. Ihsanullah Khan, Acting High Commissioner (Canberra X 0021).

*Union of South Africa*—His Excellency Mr. A. M. Hamilton (Canberra U 2370).

*United Kingdom of Great Britain and Northern Ireland*—His Excellency the Right Honourable the Lord Carrington, K.C.M.G., M.C. (Canberra U 2211).

**Commissioner for—**

*Malta*—Captain George F. L. Stivala, O.B.E. (Melbourne MU 1291).

**TRADE COMMISSIONERS OF OVERSEA GOVERNMENTS IN AUSTRALIA.**

*Canada*—Canadian Government Trade Commissioners—Mr. H. S. Hay (Acting) (Sydney BW 5696-7) and Mr. T. G. Major (Melbourne MU 4716).

*Ceylon*—Ceylon Government Trade Commissioner—Mr. Abdullah Bin Ali (Sydney BU 5298).

*India*—Indian Trade Commissioner—Mr. H. A. Sujan (Sydney BW 9518).

*Malaya*—Malayan Government Trade Commissioner—Mr. E. M. O. Martenstyn (Sydney BL 5039).

*New Zealand*—Senior New Zealand Government Trade Commissioner—Mr. R. V. Jackson (Sydney BL 3941).

New Zealand Government Trade Commissioners—Mr. A. C. Davys (Melbourne MU 8111); Messrs. T. A. Foley and W. K. Coad (Sydney BL 3941).

*United Kingdom of Great Britain and Northern Ireland*—United Kingdom Senior Trade Commissioner—Mr. F. B. Arnold, C.M.G., O.B.E. (Canberra U 2211).

United Kingdom Trade Commissioners—Messrs. N. L. Hibbs and P. B. Hunt (Canberra U 2211); Messrs. A. R. Bruce, O.B.E., A. Hartland, O.B.E., and L. F. Hope (Sydney BW 8086); Messrs. G. J. Husted, B. C. Harries and H. F. Stevens (Melbourne MU 5556); Mr. K. R. Allen (Brisbane B 2307); Mr. J. D. Leithead (Perth BA 2042).

**§ 17. Retail Trade.**

**1. General.**—The statistics in this section relate to the number of retail establishments throughout Australia and the turnover of these establishments.

Information of this nature was first collected in respect of the year ended 30th June, 1948, by a full census of all retail establishments. As this was the first census of its type in Australia, its scope and the data sought were the minima consistent with the objective of securing a record of the number of such establishments, their type, their geographical distribution, their aggregate sales of goods and a simple commodity dissection together with a record of the value of certain services provided. This census was followed by a second census of all retail establishments trading during the year ended 30th June, 1949.

A third census was taken for the year ended 30th June, 1953, in which retailers were asked to furnish more detailed information concerning the dissection of their turnover into commodity groups and questions were asked about stocks of goods on hand, the number of persons engaged in the business and credit sales.

A further census was taken in respect of the year ended 30th June, 1957, and tabulation of the results is proceeding.

In general terms, the censuses covered those establishments which normally sell goods by retail in shops, rooms, kiosks and yards. Certain types of establishments which sell services by retail (including repairs and materials therein) were also included, e.g., boot repairers, hairdressers, motor garages and service stations and cafés. The censuses included the retail sales of those factories or wholesalers who conducted a regular retail business, but excluded those who only occasionally sold goods by retail. Both new and second-hand goods were included in sales recorded by relevant retail establishments.

During the period between censuses, variations in the value of retail sales have been measured by means of quarterly sample surveys. Annual totals derived from these surveys and some of the results of the 1952-53 census are contained in this section.

2. Value of Retail Sales in Each Commodity Group, 1948-49 and 1952-53 to 1956-57, Australia.—The following table shows the value of retail sales of goods in each of the commodity groups specified in the years 1948-49 and 1952-53 to 1956-57 on a comparable basis throughout. The figures for the years 1948-49 and 1952-53 were obtained from censuses taken in respect of those years, whereas figures for the other years shown are estimates based on sample surveys.

VALUE OF RETAIL SALES: COMMODITY GROUPS, AUSTRALIA.  
(£ million.)

Commodity Group.	Year ended 30th June—					
	1949.(a)	1953.(a)	1954.(b)	1955.(b)	1956.(b)	1957.(b)
Groceries .. .. .	143.4	261.5	275.1	306.0	335.9	352.1
Butchers' Meat .. .. .	65.3	127.8	133.9	146.4	158.6	170.6
Other Food(c) .. .. .	116.6	206.8	223.7	246.6	268.7	280.3
<i>Total Foodstuffs</i> .. .. .	<i>325.3</i>	<i>596.1</i>	<i>632.7</i>	<i>699.0</i>	<i>763.2</i>	<i>803.0</i>
Beer, Wine and Spirits .. .. .	95.3	173.0	186.7	202.7	219.9	235.1
Clothing, Drapery, Piece-goods and Footwear .. .. .	237.8	355.1	387.6	422.0	437.3	442.2
Hardware(d) .. .. .	55.7	113.8	124.7	142.7	153.4	153.9
Electrical Goods(e) .. .. .	33.8	75.8	91.2	100.5	106.2	113.7
Furniture .. .. .	46.4	72.8	81.0	86.9	92.3	92.5
Other Goods(f) .. .. .	167.9	315.5	336.9	365.8	394.2	414.2
<i>Total (excluding Motor Vehicles, etc.)</i> .. .. .	<i>962.2</i>	<i>1,702.1</i>	<i>1,840.8</i>	<i>2,019.6</i>	<i>2,166.5</i>	<i>2,254.6</i>
Motor Vehicles, Parts, Petrol, etc.(g) .. .. .	166.1	417.3	(c) 491.7	583.7	633.3	640.6

(a) Census figures. (b) Survey figures. (c) Includes fresh fruit and vegetables confectionery, soft drinks, ice cream, cakes, pastry, cooked provisions, fish, etc., but excludes some delivered milk and bread. (d) Excludes basic building materials (e.g., timber, roofing tiles, bricks, etc.). (e) Includes radios, television receivers and accessories, musical instruments, domestic refrigerators, etc. (f) Includes tobacco, cigarettes, etc., newspapers, books and stationery, chemists' goods, grain and produce, jewellery, office equipment, etc. (g) Excludes farm machinery and implements, earth-moving equipment, etc.

In the foregoing table, figures for the year ended 30th June, 1949, relate to establishments with total retail sales of £50 or more; for the years ended 30th June, 1953 to 1957, they relate to establishments with total retail sales of £500 or more. The total amount of retail sales of establishments so excluded in 1952-53 was not significant (less than 0.1 per cent. of total), and their omission does not affect the validity of the comparisons shown.

3. Retail Census, Australia, 1952-53.—Tables showing statistics of the Retail Census of 1952-53 appear in Official Year Book No. 43, pages 1074-8. Details are given for:—(a) Number of establishments in each State which sold goods in each commodity group; (b) Value of retail sales of goods in each commodity group, by States; (c) Number of retail establishments and value of retail sales in each State classified according to main type of business; and (d) Takings for certain services (repair work, meals, etc., and hairdressing).

## CHAPTER XXXI.

## STATISTICAL ORGANIZATION AND SOURCES OF INFORMATION.

## § 1. Statistical Organization in Australia.

1. *Early Development of Australian Statistics.*—(i) *Crown Colony "Blue Books"*. Statistical organization in Australia was founded in the "Blue Books" which, in the Crown Colony days, were prepared annually for the information of the Colonial Office. Although primarily intended for administrative purposes, these documents have been important sources of statistical data, even though some important matters are not covered, and others only partially so. These "Blue Books" form the basis from which later statistical publications were developed. This led to an element of uniformity in statistical compilation within the British Empire.

(ii) *Statistical Registers*. Following the advent of Responsible Government, which was granted during the period 1851–1860 to all Australian States except Western Australia—and to that State in 1890—the "Blue Book" was succeeded in all States by "Statistical Registers". These were in many respects the old "Blue Books" in a new form, and were largely confined to summaries of the "by-product" statistics of Government administrative departments.

The first example of extensive Governmental organization for purely statistical purposes was the taking of periodic population censuses, which were initiated in all States under the Crown Colony régime. The growing need for quantitative data concerning the progress of the several young communities of Australia eventually led to the appointment of official Statisticians commissioned to prepare and publish such data.

(iii) *Statistical Conferences*. To enable the interchange of ideas between States and to obtain uniform State statistics which could be aggregated to Australian totals, conferences were held in the several States from as early as 1861. Altogether, six conferences were held prior to the formation of the Commonwealth Bureau of Census and Statistics in 1906. These were held in 1861, 1875, 1890, 1900, 1902 and 1903. The holding of these conferences has been continued since the formation of the Commonwealth Bureau, and a representative from New Zealand attended up to 1928.

2. *Creation of the Commonwealth Bureau of Census and Statistics.*—Under the provisions of section 51 of the Commonwealth Constitution, power is conferred on the Commonwealth Parliament "to make laws for the peace, order and good government of the Commonwealth with respect to—" (*inter alia*) "(XI.) Census and statistics". In compliance with this provision, the Census and Statistics Act, 1905 was passed, and in 1906 the Commonwealth Bureau of Census and Statistics was created. A conference of Statisticians in 1906 defined the relations between the Commonwealth and State Bureaux, and in each case the State Statistician became the representative in his own State of the Commonwealth Statistician for the purpose of administering the Commonwealth Act. In addition, each State has its own "Statistics Act", and although these are not identical in all States, they embody common principles. The Commonwealth Bureau did not attempt to duplicate the existing statistical organization, but endeavoured to use the services of the State statistical offices whenever possible, and to undertake the initial collection of statistics only in fields not already occupied by the States, or in which efficiency demanded complete centralization.

3. *Integration of Statistical Services.*—The creation and development of the Commonwealth Bureau of Census and Statistics, the frequent conferences of Commonwealth and State Statisticians, and the close and increasing liaison between officers dealing with the same subjects in the State and Commonwealth fields, did much to promote uniformity in the official statistical collections and methods employed throughout Australia. The complete realization of this aim could not, however, be achieved, even with the utmost co-operation of those concerned, while seven distinct statistical systems operated.

This became apparent after the 1914–18 War, when the economic problems that then arose drew attention to deficiencies in the Australian statistical data. With a view to overcoming these weaknesses the Prime Minister of the day proposed to the Premiers' Conference that State statistical offices be transferred to the Commonwealth. Tasmania alone agreed to this, and the transfer was effected in 1924. Since then, an amalgamated office has functioned satisfactorily in that State as a Commonwealth office which also serves State statistical needs.

The boom of the 1920's, the depression of the 1930's, the 1939-45 War, and the post-war boom, each with its special economic problems, imposed a severe strain on the Commonwealth and State statistical systems. Moreover, the development during and since the 1939-45 War of a very considerable volume of new statistics added greatly to the complexities of the several administrations in their efforts to secure, and maintain, uniformity in statistical collections. The establishment of Commonwealth statistical offices in some State capitals ameliorated the situation to some extent—indeed, without their establishment the new and expanded statistical collections could not have been carried out at all. However, this did not solve the problem, and constituted only one of a number of improvisations devised to obtain uniform data essential for national purposes, and to satisfy urgent demands for new types of statistics. Furthermore, the excessive amount of time and effort entailed in such improvisations made it impossible to devote the necessary time to the major question of supplying growing statistical needs promptly.

The emergence of the problem of providing uniform statistical services throughout Australia, adequate to meet present-day demands, was foreseen during the 1939-45 War, and in 1949 discussions were initiated with the Premiers by the Prime Minister, with the object of integrating the statistical services of the Commonwealth and the States by agreement. These negotiations were continued by correspondence, and subsequently all State Governments accepted the terms of draft agreements to integrate their respective statistical offices with that of the Commonwealth.

The Statistics (Arrangements with States) Bill was introduced into the Commonwealth Parliament on 17th April, 1956, its purpose being to seek parliamentary approval of the making of arrangements with individual States for, and the setting up of, integrated statistical services. This legislation, permissive in nature, was designed to enable the Commonwealth to enter into an agreement with any State to effect an amalgamation of Commonwealth and State statistical offices and services. The objective of such an agreement was that, in each State accepting it, there would be an integrated statistical service operated by Commonwealth statistical officers under the immediate direction of a statistician in the State who would hold office under both the Commonwealth and State governments. Both Commonwealth and State were to be adequately served with statistics, and no State would be required to surrender its existing powers in the field of statistics. The rights of officers transferred under any agreement entered into were provided for. After passing through the usual stages of Parliament, the bill became law on 12th May, 1956.

Integration of the Commonwealth and State statistical services was finally accomplished when the integration arrangement with Victoria came into effect on 15th September, 1958.

4. *Scope of the Commonwealth Bureau of Census and Statistics.*—The scope of the Commonwealth Bureau of Census and Statistics has constantly been widened, more particularly during the 1939-45 War, when the Bureau responded to the urgent demands of administration for immediate and accurate statistical information in various fields. Since the war, requirements in the administrative, industrial, financial and scientific spheres have led to the development of many new statistical collections. All the activities of the Bureau are covered by the Census and Statistics Act, which confers authority to collect information and contains stringent provisions to ensure that the information obtained is treated in strictest secrecy.

The following sections of this paragraph relate specifically to the organization and operation of the Commonwealth Bureau of Census and Statistics in Canberra. In the State Offices, the pattern is broadly similar, although local requirements have naturally given rise to differences in detail.

For administrative purposes, the Commonwealth Bureau, Canberra, is divided into a number of Divisions. These are:—Census, Compiling, Development, Methodology and Sampling, Publications, Social Accounting, Mechanical Tabulation and Administrative.

(a) *Census Division.* This Division of the Bureau is responsible for the taking of periodic population censuses and the tabulation, summarization and preparation for publication of the results obtained.

(b) *Compiling Division.* The Compiling Division is divided into the following Branches which compile statistics dealing with specific fields of activity:—

Trade and Transport Branch—Responsible for the original compilation, tabulation and analysis of statistics relating to imports and exports, and for the compilation of statistics relating to road and rail transport, aviation, shipping, posts, telegraphs and telephones and broadcasting and television.

Employment and Labour Branch—Compiles all employment estimates, wage and labour statistics.

Primary Production Branch—Deals with statistics relating to agricultural and pastoral activities, mining, forestry and fishing. Original data are supplied largely by State Statisticians.

**Secondary Production Branch**—Compiles all factory statistics both annual and monthly. Collates on a Commonwealth basis original annual data supplied by State Statisticians.

**Finance and Taxation Branch**—Compiles statistics of private finance (banking, insurance, exchange rates, etc.), public finance (Commonwealth, State and Local and Semi-Governmental authorities), and statistics relating to all aspects of Commonwealth taxation.

**Demography Branch**—Concerned with statistics of births, deaths, marriages and migration, and the making of periodic estimates of population.

(c) *Development Division.* This Division was created in order to develop new statistical collections to meet post-war demands for more adequate and up-to-date statistics, and also to examine current collections in the light of such requirements. It is divided into three Branches, namely:—

**Development Branch**—Develops new statistical collections and examines current collections in the light of present-day requirements. Included in the latter are Social Statistics.

**Prices Branch**—Deals with the collection of retail and wholesale prices and the compilation of retail and wholesale price index numbers. A staff of trained field officers is maintained in the several States to facilitate the collection of accurate information.

**Business Statistics Branch**—Conducts censuses and surveys and analyses statistics relating to internal trade (retail), business and hire purchase activities, and company investments and profits.

(d) *Methodology and Sampling Division.* Undertakes the development and application of sampling procedures to statistical collections and, in addition to furnishing technical advice to other Branches, undertakes projects relating to operations research in other Departments.

(e) *Publications Division.* This Division is responsible for the scrutiny, editing and graphical illustration of all Bureau publications, and, in collaboration with other Divisions, for the initiation, development and co-ordination of statistical publications. It also maintains a regular flow of statistical series to certain international organizations, and revises statistical material in certain oversea and local publications.

(f) *Social Accounting Division.* This Division undertakes research into the theoretical and practical problems of social accounting. It is divided into three branches as follows:—

**Balance of Payments Branch**—Collects and analyses statistics of Australia's balance of international payments.

**National Income and Expenditure Branch**—Prepares estimates of national income and expenditure.

**Quantum Indexes Branch**—Undertakes research into quantum of production.

(g) *Mechanical Tabulation Division.* This Division is equipped with modern tabulating equipment including two electronic units and is responsible for all machine tabulating work required by other Divisions of the Bureau with the exception of the Census Division. It also carries out work for other Commonwealth Departments as capacity is available.

(h) *Administrative Division.* The Administrative Division is responsible for all aspects of staff recruitment and direction, supplies, payment of accounts, etc. The Reproduction Section of the Division is equipped with multilith and duplicating machines for processing statistical statements for more immediate requirements. In addition, a special section of this Division is responsible for the examination of statistical methods and systems and the co-ordination of all statistics in Commonwealth Departments (see para. 5 below). The specialized library of official and unofficial publications on statistics and economics is controlled by the Administrative Division.

5. *Relation of the Bureau to other Commonwealth Departments.*—In October, 1950, the Commonwealth Public Service Board issued a circular relative to the compilation of statistics in other Commonwealth Departments, in which it stated that the Commonwealth Statistician should be the co-ordinating authority on all statistics in Commonwealth Departments, and that, as a general principle, where any new statistical field is to be established involving the regular collection of statistics, the Commonwealth Statistician should be consulted to ensure that they are necessary and that they are based on sound statistical methods; furthermore, that the Commonwealth Statistician should make a regular inspection, at least once every twelve months, of all statistical work done by Departments to ensure that their needs are met by the most economical means and without duplication of effort.

This project of co-ordination is being implemented as time and circumstances permit.

## § 2. Statistical Publications of Australia.

1. **General.**—The official statistical publications of Australia may be divided bibliographically into two main divisions, namely:—(i) Commonwealth publications dealing both individually and collectively with the several States of Australia; and (ii) State publications dealing with individual States only.

2. **Commonwealth Publications.**—Commonwealth publications may be grouped under two heads, namely:—(i) Publications issued by the Commonwealth Statistician; and (ii) Parliamentary and Departmental Reports and Papers.

(i) *Publications issued by the Commonwealth Statistician.* The following is a list of the principal statistical publications issued from the Commonwealth Bureau of Census and Statistics since its inauguration to July, 1958:—

*Australian Balance of Payments.*—Statements Nos. 1 to 3, 1928–29 to 1951–52.

*Australian Life Tables, 1901–1910.* *Australian Joint Life Tables, 1901–1910.*

*Australian Life Tables, 1920–1922.*

*Australian Life Tables, 1932–1934.* *Australian Joint Life Tables, 1932–1934.*

*Australian Life Tables, 1946–1948.*

*Australian Mineral Industry Statistics* (formerly *Minerals and Metals Bulletin*).—Part 2 of Quarterly Bulletin issued jointly with the Bureau of Mineral Resources.

*Australian Primary Industries.*—Report prepared for the Empire Producers Conference, Sydney, March, 1938.

*Census (1911) Results.*—Bulletins. Vols. I. (Statistician's Report), II., and III., with Appendix *Mathematical Theory of Population*.

*Census (1921) Results.*—Bulletins, Nos. 1 to 26. Parts I. to XVI., forming Vol. I., and Parts XVII. to XXIX., forming, with the Statistician's Report, Vol. II. NOTE.—Part XXVII., Life Tables.

*Census (1933) Results.*—Bulletins, Nos. 1 to 25. Parts I. to XIV., forming Vol. I., Parts XV. to XXVIII., forming Vol. II., and Parts XXIX. to XXXVIII., forming, with the Statistician's Report and Australian Life Tables, 1932–1934, Vol. III.

*Census (1947) Results.*—Bulletins, Nos. 1 to 25. Parts I. to XVI., forming Vol. I., Parts XVII. to XIX., forming Vol. II., and Parts XX. to XXVIII., forming, with the Statistician's Report and Australian Life Tables, 1946–1948, Vol. III.

*Census (1954) Results.*—See Price List at end of this volume.

*Census of Motor Vehicles, 1947–48* (see *Survey of Motor Vehicles, 1947–48*).

*Census of Motor Vehicles, 31st December, 1955.*—Bulletins, Nos. 1 to 8.

\* *Census of Retail Establishments (1947–48) Results.*—Bulletins, Nos. 1 to 7.

\* *Census of Retail Establishments (1948–49) Results.*—Bulletins, Nos. 1 to 7.

\* *Census of Retail Establishments (1952–53) Results.*—Bulletins, Nos. 1 to 14.

\* *Dairying Industry* (formerly *Summary of Dairying Industry*).—Statistical Bulletin, monthly; first issue, September, 1937.

*Demography.*—Bulletin, annually, 1911 to 1958.

\* *Factories, Principal Statistics, Summary.*—Annually, 1948–49 to 1957–58.

*Finance.*—Bulletin, 1907 to 1916–17 annually; 1917–18 and 1918–19 (one vol.); 1919–20 and 1920–21 (one vol); 1922–23 to 1957–58 annually. From 1955–56 issued in two parts; Part I., Public and Private Finance; Part II., Commonwealth Taxation.

\* *Food Production and the Consumption of Foodstuffs and Nutrients in Australia, Statistical Bulletin.* Half-yearly, 1946–47 to 1947–48; annually, 1948–49 to 1957–58.

\* *Fruit Growing Industry Summary.*—Annually, 1944–45 to 1957–58.

*Labour and Industrial Statistics.*—Memoranda and Reports, various, to 1913.

*Labour Report.*—Annually, 1913 to 1958.

\* *Livestock Numbers* (formerly *Summary of Livestock Statistics*).—Statistical Bulletin, annually, 1943 to 1958.

*Local Government in Australia.*—July, 1919.

\* *Manufacturing Industries.*—Bulletins on Individual Industries, annually, 1936–37 to 1939–40, 1940–41 (issue incomplete), and 1944–45 to 1956–57.

\* *Monthly Review of Business Statistics.*—First issue, October, 1937.

\* *Occupation Survey (1945) Results.*—Detailed tables.

*Official Year Book of the Commonwealth of Australia.*—Annually, 1907 to present issue (No. 45). Issues Nos. 40 to 44 also published in parts.

\* Distributed by the Commonwealth Statistician—for methods of obtaining other publications still in print see back page of this volume.

- Oversea Trade*.—Bulletin, annually, 1906 to 1958–59.
- \**Oversea Trade*.—Preliminary Bulletin. Annually, 1952–53 to 1958–59.
- \**Oversea Trade Statistics: Imports Cleared for Home Consumption classified according to Individual Items of the Customs Tariff, 1950–51 to 1958–59*.
- Pocket Compendium of Australian Statistics* (formerly *Statistical Digest*).—1913, 1914, 1916, and 1918 to 1959 annually.
- Population and Vital Statistics*.—Bulletins and Reports, various, 1906–1910.
- Primary Industries*.—Bulletin, annually, 1950–51 to 1957–58, in two parts—Part I. Rural Industries; Part II. Non-Rural Industries and Value of Production.
- Production*.—Bulletin, annually, 1906 to 1949–50. From 1936–37 to 1949–50 issued in two parts—Part I. Secondary Industries; Part II. Primary Industries (including Total Recorded Production); thereafter separate Bulletins (see *Primary Industries and Secondary Industries*).
- Professional Papers*.—Various. A full list appears in Official Year Book No. 13, p. 3.
- Quarterly Summary of Australian Statistics*.—First issue, No. 70. December, 1917, replacing *Monthly Summary of Australian Statistics* (Bulletins Nos. 1 to 69).
- \**Registrations of New Motor Vehicles*.—Statistical Bulletin, monthly and annually.
- \**Report of Proceedings of the Conference of British Commonwealth Statisticians, 1951*.
- \**Rural Land Use and Crop Statistics* (formerly *Summary of Crop Statistics*).—Statistical Bulletin, annually, 1943–44 to 1957–58.
- Secondary Industries*.—Bulletin, annually, 1950–51 to 1956–57.
- \**Size Classification of Rural Holdings, 1955–56*, Bulletins Nos. 1 to 7.
- Social Insurance*.—Report to the Hon. the Minister for Trade and Customs, 1910.
- Social Statistics*.—Bulletin, 1907 to 1915 annually, and 1918.
- Superannuation for the Commonwealth Public Service*.—Report to the Hon. the Minister for Home Affairs, 1910.
- \**Survey of Motor Vehicles (1947–48) Results*.—Bulletins Nos. 1 to 7.
- \**Survey of Private Pensions and Retiring Allowance Schemes, 1955–56* (reprinted in *Finance, Part I.*, Bulletin No. 47).
- \**Survey of Private Superannuation Schemes 1951–52* (reprinted in *Finance Bulletin* No. 44).
- Transport and Communication*.—Bulletin, 1906, 1908 to 1916 annually, 1919 to 1930 annually, and 1932 to 1957–58 annually.
- \**Vegetables Grown on Farms for Human Consumption*.—Statistical Bulletin, annually, 1942–43 to 1956–57.
- Wealth*.—The Private Wealth of Australia and its Growth as ascertained by various methods, together with a Report on the War Census in 1915.
- \**Wheat Industry* (formerly *Summary of the Wheat Situation*).—Statistical Bulletin, periodically; first issue, July, 1936.
- \**Wool Supplies and Utilization*.—Bulletin, annually, 1952–53 to 1957–58.

The foregoing list includes all the printed publications issued from the Bureau, and certain more important mimeographed publications issued for the most part annually. Other mimeographed statements are distributed by the Commonwealth Statistician and deal with a wide variety of subjects, as follows:—

*Annually*—Bee Farming; Bulletin of Oversea Investments; Commonwealth, State and Territory Taxation Collections; Factory Products (Principal); Fire, Marine and General Insurance; Fishing and Whaling; Milking Machines on Rural Holdings; Mining and Quarrying; Oversea Trade between Australia and Eastern Countries; Rural Statistics of the Australian Capital Territory; Tractors on Rural Holdings; University Statistics; Value of Production; Wheat Forecast and Estimate; Wine and Brandy Statistics; Wool Production.

*Half-yearly*—Australian Balance of Payments; Capital and Maintenance Expenditure; Labour Turnover; Meat Production and Utilization; Trade of Australia with the United Kingdom.

*Quarterly*—Building; Interim Retail Price Index; New Capital Raisings; Retail Sales of Goods; "C" Series Retail Price Index; Road Traffic Accidents; Tractor Statistics; Trade of Australia with Monetary Areas.

*Monthly*—Banking; Demographic Review; Employment; Exports of Wool from Australia; Export Prices Index; Gold Mining Industry; Life Assurance; Oversea Trade; Production Statistics; Retail Hire Purchase Operations of Finance Businesses; Savings Bank Statistics; Wholesale Price (Basic Materials and Foodstuffs) Index.

\* Distributed by the Commonwealth Statistician—for methods of obtaining other publications still in print see back page of this volume.

(ii) *Commonwealth Parliamentary and Departmental Reports and Papers.* Lists of the principal official reports and other documents containing statistical information issued from the inauguration of the Commonwealth appear in the *Official Year Books* up to No. 13, but it is not now practicable to undertake the preparation of such lists.

3. *State Publications.*—The chief statistical publications of each State are set out hereunder. As with the *Commonwealth Parliamentary and Departmental Reports and Papers*, it is not practicable to enumerate the various *Departmental Reports*, statements of accounts, etc., issued by officials, boards, local and semi-governmental authorities, etc., in each State.

- (a) *New South Wales*—Statistical Register (annually); *Official Year Book of New South Wales* (annually); *Pocket Year Book* (annually); *Statistical Bulletin* (monthly to December, 1919, quarterly to June, 1943, then discontinued to September, 1948); *Monthly Summary of Business Statistics*.
- (b) *Victoria*—Statistical Register (annually to 1916, then discontinued); *Victorian Year-Book* (annually); *Statistical Abstract* (quarterly to 1917, then discontinued to December, 1946).
- (c) *Queensland*—Statistical Register (annually); *Official Year Book*, 1901; *A.B.C. of Queensland Statistics* (annually to 1936, then discontinued); *Queensland Year Book* (annually 1937 to 1941, then discontinued to 1945); *Queensland Pocket Year Book* (annually).
- (d) *South Australia*—Statistical Register (annually); *Official Year Book*, 1912 and 1913; *Statesman's Pocket Year Book of South Australia* (annually); *Quarterly Summary of Statistics*.
- (e) *Western Australia*—Statistical Register (annually); *Statistical Abstracts* (quarterly, previously issued monthly to July, 1917); *Pocket Year Book of Western Australia* (annually).
- (f) *Tasmania*—Statistical Register (annually); *Pocket Year Book of Tasmania* (annually); *Monthly Review of Business Statistics*.

### § 3. The Third Conference of British Commonwealth Statisticians, Canberra, 1951.

Conferences of the Government Statisticians of the British Commonwealth were held first in London in 1920 and then in Ottawa in 1935. The Third Conference was held in Canberra from 12th to 23rd November, 1951. Delegates were present from Australia, Canada, Ceylon, India, New Zealand and the United Kingdom (including a representative of the Colonial Office). Ireland, the Commonwealth Economic Committee and the United Nations were represented by observers, and the Australian State Government Statisticians were also present. A summary of the activities of the conference may be found in *Official Year Book* No. 39, p. 1320.

### § 4. Select List of Works about, or published in, Australia.

(Compiled by the Librarian of the Commonwealth National Library.)

This list aims to meet the growing need, in Australia as publishing develops, and overseas as interest in Australia widens, for an authoritative current reference and reading list of books dealing with Australia or of Australian authorship, wherever published.

Australians will find these books in the National Library and in their State Libraries as well as in leading bookshops. Oversea readers may have access to them in the collections which the National Library maintains at 44 Australian posts abroad. They will be found also, increasingly, in leading libraries and bookshops in many countries. In the United States, for example, Australian books are included in the Farmington Plan in which 62 libraries and research institutions co-operate to ensure that at least one copy of all material published in any part of the world and likely to be required for a serious purpose will be available promptly somewhere in the country. Under a similar arrangement, Australian books are supplied to the National Library of Canada.

The list is classified broadly by subject and under each heading there is first a list of the principal standard books still in print, then a list of selected books and official publications (excluding annual reports) published in the last few years. To ensure that, so far as is

possible, an evenness of standard is maintained in the compilation of the list, the advice of a representative range of experts in the various subject fields has been sought. Where known the retail price in the country of publication is given, but this is subject to fluctuation.

The Library also issues a series of select lists which include:—*Australian Public Affairs Information Service* (monthly and, since 1955, cumulated annually); a subject index of material in new books, pamphlets, current periodicals and government publications from English-speaking countries, with an important bearing on investigations into Australian political, economic, cultural and social affairs; and the following full bibliographies.

*Australian Government Publications*, a monthly list covering both the Commonwealth and the States;

*Books published in Australia*, a monthly list of books supplied to the National Library under copyright.

The two last-mentioned publications are cumulated annually as the *Annual Catalogue of Australian Publications* which includes also a list of books published overseas of Australian interest or by authors resident in Australia, a select list of the more important Australian periodical and serial publications and a directory of publishers.

#### General and Descriptive.

##### STANDARD WORKS IN PRINT.

- AUSTRALIAN ENCYCLOPAEDIA: (new ed.): 10 v. Syd., Angus & Robertson, 1958. £50.  
 AUSTRALIAN INSTITUTE OF POLITICAL SCIENCE. Northern Australia: task for a nation. Syd., Angus & Robertson, 1954. 25s.  
 CAIGER, G., ed. The Australian way of life. Lond., Heinemann, 1953. 12s. 6d.  
 COOK, J. The journals of Captain James Cook on his voyages of discovery: ed. from the original manuscripts by J. C. Beaglehole with the assistance of J. A. Williamson, J. W. Davidson and R. A. Skelton: v. 1: Voyage of the *Endeavour*, 1768-1771. Lond., Hakluyt Society, 1955. 80s. and 50s. Volume one of the first definitive edition of Cook's journals.  
 FINLAYSON, H. H. The red centre: man and beast in the heart of Australia (2nd ed.). Syd., Angus & Robertson, 1952. 21s.  
 HILL, ERNESTINE. The great Australian loneliness. Melb., Robertson & Mullens, 1952. 27s. 6d.  
 OFFICIAL YEAR BOOK OF THE COMMONWEALTH OF AUSTRALIA: No. 1 to date. Canb., Govt. Pr., 1908 to 1946-47 (No. 37). 5s. per issue; after No. 38, 10s. Latest issue No. 44, 1958.  
 TAYLOR, T. G. Australia: a study of warm environments and their effect on British settlement (6th ed.). Lond., Methuen, 1951. 30s.  
 UNITED STATES—Interior, Department of the—Office of Geography. Australia: official standard names approved by the United States Board on Geographic Names. Wash., D.C. (1957).  
 WALKABOUT: Australian geographical magazine: v. 1 to date. Melb., Australian Geographical Society, 1934 to date. Monthly, 24s. per annum.

##### RECENT PUBLICATIONS OF INTEREST.

- ANGUS AND ROBERTSON LTD. Catalogue of Australian books (Syd., 1958).  
 AUSTRALIAN WOMEN'S WEEKLY. The Australian year. Syd., Australian Consolidated Press Ltd., 1958. 7s. 6d.  
 BANK OF NEW SOUTH WALES. Australia for the visitor. Syd., 1956.  
 BEATTY, B. The white roof of Australia. Melb., Cassell, 1958. 25s.  
 BEST, R. J., ed. Introducing South Australia. (Melb.) Melbourne Univ. Press for Australian and New Zealand Association for the Advancement of Science (1958). 37s. 6d. Handbook prepared for the A.N.Z.A.A.S. meeting, Adelaide, August, 1958.  
 FITZPATRICK, KATHLEEN. Australian explorers: a selection from their writings with an introduction. Lond., Oxford Univ. Press, 1958. 9s. 6d.  
 HILL, ERNESTINE. The Territory. Syd., Angus and Robertson, 1955. 25s. An historical account of the Northern Territory and its pioneers.  
 HOLFORD, Sir WILLIAM G. Observations on the future development of Canberra, A.C.T.: made at the request of the Commonwealth Government. Canb., Govt. Pr. (1958).  
 HURLEY, J. F. Australia: a camera study. Syd., Angus and Robertson, 1955. 45s.  
 JOHNSTON, F. H., comp. A glimpse of Australia. (Syd., F. H. Johnston Pub. Co., 1958). 21s. 6d.  
 LEEPER, G. W., ed. Introducing Victoria. Melb., Melbourne Univ. Press (for A.N.Z.A.A.S.), 1955. 30s.  
 MANDER, A. E. The making of the Australians. Melb., Georgian House (1958). 10s. 6d.  
 NIEMELA, J. N. Australia: the great south land. Syd., Angus and Robertson, 1956. 15s.  
 O'CONNOR, ELIZABETH. Steak for breakfast. Syd., Angus and Robertson (1958). 17s. Experiences of a young mother on an outback cattle station in Queensland.  
 PRINGLE, J. M. D. Australian accent: drawings by George Molnar. Lond., Chatto and Windus, 1958. 18s.  
 REA, B. Up and down the Sydney road: the romance of the Hume Highway. Melb. Georgian House, 1958. 25s.  
 SIMPSON, C. Australian image. Syd., Legend Press, 1956. 32s. 6d. Illustrated with reproductions of the works of Australian landscape painters.

General and Descriptive—*continued.*RECENT PUBLICATIONS OF INTEREST—*continued.*

- SYDNEY CITY COUNCIL. The city of Sydney: official guide. Syd., 1958.  
 TAYLOR, D. Ten stars south of Asia. Lond., Hale, 1957. 16s.  
 TAYLOR, T. G. Sydneyside scenery and how it came about (also Canberra and Kosciusko). (Syd.) Angus and Robertson, 1958. 35s.  
 WARD, R. The Australian legend. Melb., Oxford Univ. Press, 1958. 45s. An historical analysis of Australian national traits.  
 WINSTON, D. Sydney's great experiment: the progress of the Cumberland county plan. Syd., Angus and Robertson, 1957. 37s. 6d.  
 ZIEGLER, O. L. *ed.* This is Australia: ed. and produced by Oswald L. Ziegler, with the collaboration of the State governments of New South Wales, Victoria, South Australia and Western Australia, and the Commonwealth government departments. Syd., Oswald Ziegler Publications, 1957. 50s.

## Territories Outside Australia.

## STANDARD WORKS IN PRINT.

- AUSTRALIAN NATIONAL ANTARCTIC RESEARCH EXPEDITION, 1947-1949. Reports. Melb., Antarctic Division, Department of External Affairs, 1951 to date.  
 GORDON, D. C. The Australian frontier in New Guinea 1870-1885. N.Y., Columbia Univ. Press, 1951. \$4.25.  
 HANDBOOK OF PAPUA AND NEW GUINEA, 1954: comp. and ed. by R. W. Robson. Syd., Pacific Publications, 1954. 15s.  
 LAW, P. G., ANARE. Australia's Antarctic outposts: by Phillip Law and John Bechervaise. Melb., Oxford Univ. Press, 1957. 60s.  
 LEESON, IDA. A bibliography of bibliographies of the South Pacific. Melb., Oxford Univ. Press, 1954. 15s. Published under the auspices of the South Pacific Commission.  
 PAPUA AND NEW GUINEA, Territory of. Official research publications: no. 1 to date. Port Moresby, Govt. Pr., 1951 to date.  
 PAPUA AND NEW GUINEA, Territory of—Laws, statutes &c. Laws of the Territory of Papua-New Guinea, 1945-1949 (annotated) . . . together with supplements to the Laws of the Territory of Papua, 1888-1945 (annotated) and the laws of the Territory of New Guinea 1921-1945 (annotated). Syd., Govt. Pr., 1952.  
 SCHOLES, W. A. Seventh continent: saga of Australian exploration in Antarctica 1895-1950. Lond., Allen & Unwin, 1953. 21s.  
 STANNER, W. E. H. The South Seas in transition: a study of post-war rehabilitation and reconstruction in three British Pacific dependencies. Syd., A'sian Pub. Co., 1953. 50s.  
 WILLIAMS, F. E. Orokaiva magic. Oxford, Oxford Univ. Press, 1928. 12s. 6d.  
 ——— Orokaiva Society. Oxford, Oxford Univ. Press, 1930. 25s.  
 ——— Papuans of the Trans-Fly. Oxford, Oxford Univ. Press, 1936. 30s.  
 See also the annual reports of the Administrators of the various Territories, and reports to the General Assembly of the United Nations on trusteeship territories, the anthropological reports of the Governments of Papua and New Guinea, and material appearing in *Oceania*.

## RECENT PUBLICATIONS OF INTEREST.

- BELSHAW, C. S. The great village: the economic and social welfare of Hanuabada, an urban community in Papua. Lond., Routledge & K. Paul, 1957. 30s.  
 BJERRE, J. The last cannibals. Lond., M. Joseph, 1956. 21s. An account of primitive civilizations in Central Australia and in New Guinea.  
 BROWN, P. L. Twelve came back. Lond., Hale, 1957. 18s. An account of the Australian National Antarctic Research Expedition at Heard Island, 1952-1953.  
 DEAN, Beth. Softly, wild drums: in New Guinea to-day with Beth Dean and Victor Carell. Syd., Ure Smith, 1958. 25s.  
 HASLUCK, Hon. P. M. C. Australian policy in Papua and New Guinea. Syd., University of Sydney, 1956. (George Judah Cohen memorial lecture, 1956).  
 ——— Australia's task in Papua and New Guinea. Melb. Australian Institute of International Affairs, 1956. (Roy Milne memorial lecture, 1956).  
 KEARNS, W. H. The silent continent: by W. H. Kearns and Beverley Britton. Lond., Gollancz, 1955. 18s. A history of Antarctic discovery.  
 LASERON, C. F. South with Mawson: reminiscences of the Australasian Antarctic Expedition, 1911-14 (2nd ed.) Syd., Angus and Robertson, 1957. 21s.  
 MEAD, MARGARET. New lives for old: cultural transformation—Manus, 1928-1953. N.Y., Morrow, 1956. \$6.75.  
 ROWLEY, C. D. The Australians in German New Guinea 1914-1921. Melb., Melbourne Univ. Press, 1958. 52s. 6d.  
 RUMEN, O. Land of Dahori: tales of New Guinea. Phil., Lippincott, 1957. \$3.75.  
 SIMPSON, C. Adam in plumes. Syd., Angus and Robertson, 1954. 25s.  
 ——— Islands of men: a six-part book about life in Melanesia. Syd., Angus and Robertson, 1955. 25s.

## History.

**STANDARD WORKS IN PRINT.**

- CLARK, C. M. H., *ed.* Select documents in Australian history 1788–1900: selected and ed. by C. M. H. Clark with the assistance of L. S. Pryor. 2v. Syd., Angus & Robertson, 1950–1955. 112s.
- CRAWFORD, R. M. Australia. Lond., Hutchinson's Univ. Library, 1952. 8s. 6d.
- FITZPATRICK, B. C. British Empire in Australia: an economic history 1834–1939 (2nd ed.). Melb., Melbourne Univ. Press, 1949. 17s. 6d.
- GREENWOOD, G., *ed.* Australia: a social and political history. Syd., Angus & Robertson, 1955. 45s.
- HISTORICAL RECORDS OF AUSTRALIA: (ed. by J. F. Watson). Syd., Commonwealth National Library, 1914 to 1925. 65s. *per v.* 34 v. have so far appeared. Publication has been suspended since 1925.
- HISTORICAL STUDIES: AUSTRALIA AND NEW ZEALAND. Melb., Melbourne Univ. Press, 1940 to date. Bi-annual. 21s. *per annum.*
- NADEL, G. H. Australia's colonial culture: ideas, men and institutions in mid-nineteenth century eastern Australia: foreword by C. Hartley Grattan. Melb., Cheshire, 1957. 30s.
- O'BRIEN, E. M. The foundation of Australia (1786–1800): a study in English criminal practice and penal colonization in the eighteenth century: foreword by John M. Ward (2nd ed.). Syd., Angus and Robertson, 1950. 25s.
- SCOTT, Sir ERNEST. A short history of Australia (8th ed.). Melb., Oxford Univ. Press, 1950. 14s. 6d.
- SHANN, E. O. G. An economic history of Australia. Melb., Georgian House, 1948. 18s. First published in 1930.
- SHAW, A. G. L. Economic development of Australia (3rd ed.). Melb., Longmans, 1955. 15s. 6d.
- The story of Australia. Lond., Faber, 1955. 15s.

**RECENT PUBLICATIONS OF INTEREST.**

- ADVERTISER NEWSPAPERS LTD. The South Australian story: (story by Max Lamshed) Adel., 1958. 12s. 6d. Published to mark the centenary of the Advertiser, 1858–1958.
- BARRY, J. V. Alexander Maconochie of Norfolk Island: a study of a pioneer in penal reform. Melb., Oxford Univ. Press, 1958. 50s.
- BROWN, P. L. Clyde Company papers: v.3, 1841–45. Lond., Oxford Univ. Press, 1958. 68s.
- CLARK, C. M. H. Sources of Australian history: selected and ed. by M. Clark. Lond., Oxford Univ. Press, 1957. 9s. 6d. (World's classics, 558).
- COLLINS, C. R. Saga of settlement: a brief account of the life and times of Lieutenant-colonel David Collins, 1st Judge Advocate of the colony of New South Wales and Lieutenant-governor of southern Van Diemen's Land. Perth, Imperial Printing Co., printers, 1957. 25s.
- COOK, J. The explorations of Captain James Cook in the Pacific as told by selections of his own journals, 1768–1779: ed. by A. Grenfell Price: illus. by Geoffrey C. Ingleton. Melb., Georgian House, 1958. 70s.
- FITZPATRICK, B. C. The Australian commonwealth: a picture of the community. Melb., Cheshire, 1956. 30s.
- GRANT, J. The Melbourne scene: arranged and introduced by James Grant & Geoffrey Serle. Melb., Melbourne Univ. Press, 1957. 42s.
- IDRIESS, I. L. Back o'Cairns. Syd., Angus and Robertson, 1958. 22s. 6d. Reminiscences of the pioneering days of Cairns and the surrounding districts.
- LA NAUZE, J. A. The Hopetoun blunder: the appointment of the first Prime Minister of the Commonwealth of Australia, December, 1900. (Melb.) Melbourne Univ. Press for Australian Humanities Research Council, 1957. 5s. (Australian Humanities Research Council. Publication no. 1.)
- MARTINDALE, H. G. New crossing place: the story of Seymour and its shire: foreword by G. S. Browne. Melb., Cheshire, 1958. 30s.
- PIKE, D. H. Paradise of dissent: South Australia 1829–1857. Melb., Longmans Green, 1957. 70s.
- SCHOLES, W. A. The sixth continent. Lond., Allen & Unwin, 1958. 21s. Includes an Australian chronology, and list of explorers of Australia.
- SCOTT, G. R. Sydney's highways of history. Melb., Georgian House, 1958. 42s.
- WARD, J. M. Earl Grey and the Australian colonies, 1846–1857: a study of self-government and self-interest. Melb., Melbourne Univ. Press, 1958. 63s.
- WEBSTER, MONA S. John McDouall Stuart. Melb., Melbourne Univ. Press, 1958. 42s.
- ZIEGLER, O. L. Symphony on a city: the story of the City of Newcastle, New South Wales, its birth, its development and its place in Australia: produced by Oswald L. Ziegler: story by Leo Butler: design by Gert Sellheim, with monochromes by Rufus Morris. Syd., Oswald Ziegler Publications for the Council of the City of Newcastle, 1957. 30s.

**Military and Naval History.****STANDARD WORKS IN PRINT.**

- AUSTRALIA—Army, Department of—Public Relations Directorate. The Australian army at war: an official record of service in two hemispheres, 1939–1945. Melb., 1947.
- AUSTRALIA IN THE WAR OF 1939–45: (ed. by Gavin Long): Ser. 1, v. 1 to date. Canb., Australian War Memorial, 1952 to date. Various prices. *Contents:* Series 1 (Army), 4 v. have so far appeared; Series 2 (Navy), 1 v. has so far appeared; Series 3 (Air), 2 v. have so far appeared; Series 4 (Civil), 3 v. have so far appeared; Series 5 (Medical), 3 v. have so far appeared.
- AUSTRALIAN WAR MEMORIAL, *Canberra*. With the Australians in Korea: ed. . . . by Norman Bartlett, Canb., 1954. 25s.
- BEAN, C. E. W. Anzac to Amiens: a shorter history of the Australian fighting services in the first world war. Canb., Australian War Memorial, 1946. 25s.
- LEE, J. E. Duntroon: the Royal Military College of Australia 1911–1946. Canb., Australian War Memorial, 1952. 30s.
- MACANDIE, G. L. The genesis of the Royal Australian Navy: a compilation. Syd., Govt. Pr., 1949. 25s.
- MCGUIRE, FRANCES M. The Royal Australian Navy: its origin, development and organization. Melb., Oxford Univ. Press, 1948. 16s.

Military and Naval History—*continued*.STANDARD WORKS IN PRINT—*continued*.

- NORTON, C. F. *Fighting ships of Australia and New Zealand*: foreword by Vice-Admiral Sir John Collins. Syd., Angus & Robertson, 1953. 15s.  
 OFFICIAL HISTORY OF AUSTRALIA IN THE WAR OF 1914-1918: (ed. by C. E. W. Bean): 12 v. Canb., Australian War Memorial, 1921-42. 21s. *per v.* v. 8, 10, 11, 18s.  
 OFFICIAL HISTORY OF THE AUSTRALIAN ARMY MEDICAL SERVICES IN THE WAR OF 1914-1918: (ed. by Col. A. G. Butler): 3 v. Canb., Australian War Memorial, 1930-43. 21s. *per v.*  
 SWAN, W. N. *Spearheads of invasion: an account of the seven major invasions carried out by the Allies in the south-west Pacific area during the recent world war as seen from a Royal Australian Naval Landing Ship Infantry*: foreword by Vice-Admiral Sir John Collins. Syd., Angus & Robertson, 1953. 25s.

## RECENT PUBLICATIONS OF INTEREST.

- AUSTRALIAN WAR MEMORIAL, *Canberra*. Pictorial history of Australia at war, 1939-45: ed. for the Board of Management by Norman Bartlett (and Charles Meeking) Canb., 1958. 210s. 5v.  
 BEAN, C. E. W. *Two men I knew: William Bridges and Brudenell White*. Syd., Angus and Robertson, 1957. 25s.  
 CHARLWOOD, D. E. C. *No moon to-night*. Lond., Angus & Robertson, 1956. 16s. A vivid account of the work of the Bomber Command.  
 MOOREHEAD, A. C. *Gallipoli*. Lond., Hamilton, 1956. 21s.  
 PAUL, R. A. *Retreat from Kokoda*. Melb., Heinemann, 1958. 30s.  
 RICHARDSON, H. *One man war: the Jock McLaren story*. Syd., Angus & Robertson, 1956. 16s. McLaren, a member of the Australian Eighth Division in the second World War, after escaping from Singapore, participated in guerilla warfare in the Philippines and later in Borneo.  
 SOUTHALL, I. *Bluey Truscott: Squadron Leader Keith William Truscott, R.A.A.F., D.F.C. and Bar*. Syd., Angus and Robertson, 1958. 25s.  
 TAYLOR, G. *Piece of cake*. Lond., Davies, 1956. 15s. Experiences of a member of the R.A.A.F. who was shot down in Germany in 1943.

## Religious History.

## RECENT PUBLICATIONS OF INTEREST.

- ALEXANDER, F., *ed.* *Four bishops and their See, Perth, Western Australia 1857-1957*. Nedlands (W.A.), Univ. of Western Australia Press, 1957. 22s. 6d.  
 ELKIN, A. P. *The diocese of Newcastle: a history of the diocese of Newcastle, N.S.W., Australia*. Syd., A'sian Medical Pub. Co., 1955. 60s.  
 FRASER, R., *ed.* *A historical sketch on the Diocese of North Queensland: published to commemorate the 80th anniversary of the founding of the See*. (Townsville, 1958.) 10s.  
 GOLDMAN, L. M. *The Jews in Victoria in the nineteenth century*. Melb., Author 1954. 63s.  
 GSELL, F. X. *The bishop with 150 wives: fifty years as a missionary: epilogue by André Dupeyrat*. Lond., Angus & Robertson, 1955. 16s.  
 JOHNSON, J. A. A. *A seed that grew: a hundred years of Catholic life on the North Shore 1856-1956*. Syd., Printed by Cresta Printing Co., 1956. 6s.  
 JOSE, G. H. *The Church of England in South Australia 1836-1905*. Adel., Church Office, 1937-1955. 15s. 3 v.  
 THORPE, O. *Mary McKillop: the life of Mother Mary of the Cross: foundress of the sisters of St. Joseph of the Sacred Heart: foreword by Cardinal Gilroy*: 2nd ed. Lond., Burns & Oates, 1957. 37s. 3d.  
 WALKER, A. *Heritage without end: illus. by Frank Whitmore (2nd ed.)*. Melb., General Conference Literature and Publications Committee of the Methodist Church of Australasia, 1953. 3s. 6d. An historical account of the Methodist Church in Australia.  
 WEBB, L. C. *The conciliar element in the Anglican tradition*. Canb. St. Mark's Library, 1957. (St. Mark's Library publications, no. 2).

## Biography.

## STANDARD WORKS IN PRINT.

- PALMER, E. VANCE. *National portraits (3rd ed.)*. Melb., Melbourne Univ. Press, 1954. 15s.  
 SERLE, P. *Dictionary of Australian biography*. 2 v. Syd., Angus & Robertson, 1949. 105s.  
 WHO'S WHO IN AUSTRALIA. Melb., Herald Press, 1906 to date. 75s. *per issue*. Latest issue: 16th, 1959.

## RECENT PUBLICATIONS OF INTEREST.

- ALLAN, G. W. D., *ed.* *Early Georgian: extracts from the journal of George Allen (1800-1877)*. Syd., Angus and Robertson, 1958. 25s. George Allen was the first solicitor to receive his professional training in New South Wales.  
 BASSETT, MARNIE. *The governor's lady: Mrs. Philip Gidley King: an Australian historical narrative (2nd ed.)*. Lond., Oxford Univ. Press, 1956. 20s. Philip Gidley King was Governor of New South Wales from 1800 to 1806.  
 BOLTON, G. C. *Alexander Forrest: his life and times*. Melb., Melbourne Univ. Press in association with the Univ. of Western Australia Press, 1958. 21s. This biography of the brother of Lord Forrest deals with his work as an explorer and his activities in pastoral and public life.  
 BRADDON, R. R. *Nancy Wake*. Melb., Cassell, 1956. 21s. Biography of an Australian-born leader in the French Resistance movement of World War II.

## Biography—continued.

## RECENT PUBLICATIONS OF INTEREST—continued.

- BROOKES, MABEL. *Crowded galleries*: by Dame Mabel Brookes in collaboration with Sir Norman Brookes. Melb., Heinemann, 1956. 30s. The life story of husband and wife, well known in international sport, and in Melbourne public and social life.
- CHISHOLM, A. R. *Men were my milestones*: Australian portraits and sketches. Melb., Melbourne Univ. Press, 1958. 27s. 6d.
- GROSS, A. Charles Joseph La Trobe: superintendent of the Port Phillip district 1839-1851, Lieutenant-governor of Victoria 1851-1854. Melb., Melbourne Univ. Press, 1956. 18s. 6d.
- HANCOCK, Sir W. KEITH. *Country and calling*. Lond., Faber, 1954. 18s. Autobiography.
- HAWKE, JESSICA. *Follow my dust*. Lond., Heinemann, 1957. 21s. A biography of Arthur Upfield by his wife.
- IDRIESS, I. L. *Flynn of the Inland* (new ed.). Syd., Angus & Robertson, 1956. 25s. Biography of the founder of the Australian Inland Mission and the Flying Doctor Service.
- LINDSAY, J. *Life rarely tells*: an autobiographical account ending in the year 1921 and situated mostly in Brisbane, Queensland. Lond., Bodley Head, 1958. 21s. An account of the early life of a well known Australian writer who is a son of Norman Lindsay.
- MACMILLAN, D. S. *A squatter went to sea*: the story of Sir William Macleay's New Guinea expedition (1865) and his life in Sydney. Syd., Currawong Pub. Co. 1957.
- MACQUARIE, L. *Lachlan Macquarie*: governor of New South Wales: journals of his tours in New South Wales and Van Diemen's Land 1810-1822. Syd., Public Library of New South Wales, 1956. 90s.
- MAWSON, FRANCISCA A. *Lady*: A vision of steel: the life of G. D. Delprat, general manager of B.H.P. 1898-1921; by Paquita Mawson; foreword by R. G. Menzies and an introd. by Essington Lewis: (epilogue by N. R. Wills). Melb., Cheshire, 1958. 42s.
- REID, W. S. H. *John Grant's journey*. Lond., Heinemann, 1957. 21s. Biography of a convict transported to New South Wales in 1803, compiled from original letters and diaries.
- TAYLOR, T. G. *Journeyman Taylor*: the education of a scientist. Lond., Hale, 1958. 25s. This autobiography of the well-known geographer includes an account of his experiences as Senior Geologist to Captain Scott's second Antarctic expedition.
- WADHAM, Sir SAMUEL M. *Sir Samuel Wadham: selected addresses with a biographical study by Geoffrey Blainey*. Melb., S. M. Wadham Testimonial Fund Committee, 1957.
- WHYTE, W. F. *William Morris Hughes: his life and times*. Syd., Angus and Robertson, 1957. 50s. W. M. Hughes, possibly the most widely-known politician in the history of the Commonwealth, sat in the Federal Parliament from 1901 to the time of his death in 1952. He was Prime Minister during World War I.

## Education.

## STANDARD WORKS IN PRINT.

- AUSTRALIA—Committee on *Australian Universities*. Report. Canb., Govt. Pr., 1957.
- AUSTRALIAN COUNCIL FOR EDUCATIONAL RESEARCH. *A brief guide to Australian universities* (3rd ed.). Melb., 1955. 4s.
- The early years: a summary of an enquiry into age of admission, classification and promotion practices in Australian primary schools. Melb., 1957. 1s.
- A record of Council activities 1930-1955*. Melb., 1955.
- Review of education in Australia 1948-1954*: ed. by R. M. McDonnell, W. C. Radford and P. M. Staurengi. Melb., 1956. 40s.
- AUSTRALIAN LIBRARY JOURNAL. Syd., Library Association of Australia, 1951 to date. Quarterly. 20s. per annum.
- AUSTRALIAN VICE-CHANCELLORS' COMMITTEE. *A symposium on the place of the Australian university in the community and post-graduate studies in the Australian universities*. Canb., 1955. gratis.
- BUTTS, R. F. *Assumptions underlying Australian education*. Melb., Australian Council for Educational Research, 1955. 12s.
- COLE, P. R., ed. *The rural school in Australia*. Melb., Melbourne Univ. Press, 1937. 10s.
- RADFORD, W. C., comp. *The non-government schools of Australia: a descriptive and statistical account*. Melb., Melbourne Univ. Press, for Australian Council for Educational Research, 1953. 21s.
- RAYNER, S. A. *Correspondence education in Australia and New Zealand*. Melb., Melbourne Univ. Press, 1949. 10s.

## RECENT PUBLICATIONS OF INTEREST.

- ANCHEN, J. O. *Frank Tate and his work for education*. Melb., Australian Council for Educational Research, 1956. 30s.
- AUSTIN, A. G. *George William Rusden and national education in Australia, 1849-1862*. Melb., Melbourne Univ. Press, 1958. 27s.
- AUSTRALIA—National Library Inquiry Committee. *Commonwealth National Library: report: 1956-57, together with appendices*. Canb., Govt. Pr., 1957.
- BLAINNEY, G. *A centenary history of the University of Melbourne*. Melb., Melbourne Univ. Press, 1957. 37s. 6d.
- CRANE, A. R. *Peter Board: his contribution to the development of education in New South Wales*: by A. R. Crane and W. G. Walker. Melb., Australian Council for Educational Research, 1957. 30s. (A.C.E.R. research series, no. 71.)
- DIMMACK, M. *Modern art education in the primary school*. Melb., Macmillan, 1958. 42s.
- FRENCH, E. L. *Melbourne studies in education, 1957-58*. Melb., Melbourne Univ. Press, 1958. 25s.
- GABRIEL, J. *An analysis of the emotional problems of the teacher in the classroom*. Melb., Cheshire, 1957. 35s.
- GRIFFITHS, D. C., comp. *Documents on the establishment of education in New South Wales, 1789-1880*. Melb., Australian Council for Educational Research, 1957. 30s. (A.C.E.R. research series, no. 70.)
- HARDIE, C. D., ed. *Science in Australian primary schools: (contributions by C. D. Hardie and others)*. Melb., Melbourne Univ. Press, 1957. 21s.
- MANNING, A. E. *The bodgie: a study in psychological abnormality*. Well. (N.Z.), Angus and Robertson, 1958. 10s. 6d.
- PHILLIPS, F. G. *School is out*. Syd., Angus & Robertson, 1957. 18s. 6d.

Education—*continued.*RECENT PUBLICATIONS OF INTEREST—*continued.*

- SCRONELL, FLORENCE E. Educating spastic children: the education and guidance of the cerebral palsied. Edin., Oliver & Boyd, 1956.
- THE SYDNEIAN. Sydney Grammar School: the centenary 1957. Syd., Trustees of Sydney Grammar School, 1957. 10s.
- SYDNEY. Church of England Girls' Grammar School—*Council.* Sydney Church of England Girls' Grammar School, 1895–1955. Syd., 1958.
- VICTORIA. PUBLIC LIBRARY. The Public Library of Victoria: 1856–1956. Melb., 1956. 25s.

## Constitution and Administration.

## STANDARD WORKS IN PRINT.

- AUSTRALIA—*Laws, Statutes, etc.* The Acts of the Parliament of the Commonwealth of Australia passed from 1901 to 1950: to which is prefixed the Commonwealth of Australia Constitution Act. . . . as altered to 31st December, 1950, with notes of cases, tables and indexes. Syd., Law Book Co., 1952–1955. 420s. 6 v. Acts passed since 1950 are included in annual supplementary volumes.
- AUSTRALIA—*Prime Minister's Department.* The Federal Guide: a handbook of the organization and functions of Commonwealth government departments. June, 1957. Canb., 1957.
- AUSTRALIA—*Royal Commission on the Constitution of the Commonwealth.* Report. Canb., 1929. 10s. 6d.
- AUSTRALIAN DIGEST, 1825–1957: being a digest of the reported decisions of the Australian Courts and of Australian appeals to the Privy Council: with table of cases, ed. by B. Sugerman and others: supplements, 1934 to date. Syd., Law Book Co., 1934 to date.
- AUSTRALIAN LAW JOURNAL. Syd., Law Book Co., 1927 to date. 75s. *per annum.*
- CAMPBELL, W. J. Australian state public finance. Syd., Law Book Co., 1954. 50s.
- COMMONWEALTH LAW REPORTS: v. 1 to date. Syd., Law Book Co., 1903 to date. Annual. 66s.
- CRAIG, JEAN I., *comp.* Bibliography of public administration in Australia: (1850–1947): introd. by T. H. Kewley. Syd., Department of Government and Public Administration, University of Sydney, 1955. 20s.
- CRISP, L. F. Parliamentary government of the Commonwealth of Australia (2nd ed.). Lond., Longmans, 1954. 21s.
- FOENANDER, O. de R. Better employment relations and other essays in labour. Syd., Law Book Co., 1954. 30s.
- FRIEDMANN, W. G. Principles of Australian administrative law. Melb., Melbourne Univ. Press, 1950. 12s. 6d.
- MILLER, J. D. B. Australian government and politics, an introductory survey. Lond., Duckworth, 1954. 15s.
- NICHOLAS, H. S. The Australian constitution . . . an analysis (2nd ed.). Syd., Law Book Co., 1952. 70s.
- PATON, G. W., *ed.* The Commonwealth of Australia: the development of its laws and constitution. Lond., Stevens, 1952. 55s.
- PUBLIC ADMINISTRATION. Syd., Institute of Public Administration, 1939 to date. Quarterly. 5s. *per issue.*
- SAWER, G. Australian government to-day (6th ed.). Melb., Melbourne Univ. Press, 1958. 4s. 6d.
- Cases on the constitution of the Commonwealth of Australia (2nd ed.). Syd., Law Book Co., 1957.
- WYNES, W. A. Legislative, executive and judicial powers in Australia: being a treatise on the distribution of legislative, executive and judicial powers of Commonwealth and States under the Commonwealth of Australia Constitution Act (2nd ed.). Syd., Law Book Co., 1956. 95s.

## RECENT PUBLICATIONS OF INTEREST.

- AUSTRALIAN INSTITUTE OF POLITICAL SCIENCE—*Spring Forum, Armidale*, 1955. New states for Australia: by R. S. Parker . . . (and others). Syd., 1955. 12s. 6d.
- Summer School, 24th, Canberra, 25th–27th Jan.*, 1958. New Guinea and Australia: (papers read at the Summer School: ed. by John Wilkes: introd. by D. M. Cleland). Syd., Angus and Robertson, 1958. 25s.
- BLAIR, L. C. L. The Commonwealth Public Service. Melb., Melbourne Univ. Press, 1958. 9s. 6d.
- COOMBE, G. D. Responsible government in South Australia. Adel., Govt. Pr., 1957.
- GARRAN, Sir ROBERT R. Prosper the Commonwealth. Syd., Angus and Robertson, 1958. 50s.
- GREEN, F. C. A century of responsible government (in Tasmania) 1856–1956. Hobart, Govt. Pr., 1956.
- HARDING, G. Uniform railway gauge. Melb., Lothian, 1958. 30s. An account of the origin of the break of gauge in Australia, and the various projects to overcome it.
- LARCOMBE, F. A. A history of local government in New South Wales. Syd., Local Government and Shires Associations, 1955. 2s. 6d.
- LEGGE, J. D. Australian colonial policy: a survey of native administration and European development in Papua. Syd., Angus & Robertson, 1956. 25s.
- MELBOURNE UNIVERSITY—*Department of Political Science.* The government of Victoria: an analysis of the machinery of state. Melb., Melbourne Univ. Press, 1958. 12s. 6d.
- PERLMAN, M. Judges in industry: a study of labour arbitration in Australia. Melb., Melbourne Univ. Press, 1954. 37s. 6d.
- ROBINSON, R. H. For my country: a factual and historical outline of local government in Queensland. Brisb., W. R. Smith and Paterson Pty. Ltd., 1957.
- SAYERS, C. E. One hundred years of responsible government in Victoria: 1856–1956: by C. E. Sayers and others. Melb., Govt. Pr., 1957.
- SCARROW, H. A. The higher public service of the Commonwealth of Australia. Durham, N. C., Duke Univ. Press, 1957. \$3.50. (Duke University Commonwealth Studies Centre publications.)
- SUMMER SCHOOL IN ARCHIVES, *University of Sydney, 5th–7th Mar.*, 1957. "Archives—techniques and functions in a modern society: proceedings at the Summer School". Syd., New Century Press (for the University of Sydney and Business Archives Council of Australia, N.S.W. Branch). 1957. 10s.

## Law.

## RECENT PUBLICATIONS OF INTEREST.

- AUSTRALIAN ENCYCLOPAEDIA OF FORMS AND PRECEDENTS OTHER THAN COURT FORMS. Syd., Butterworth, 1955 to date. 97s. 6d. *per v.* 7v. and one supplement have so far been issued.
- BAALMAN, J. Outline of law in Australia (2nd ed.). Syd., Law Book Co., 1955. 25s.
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- FLEMING, J. G. The law of torts. Syd., Law Book Co., 1957. 84s.
- GUNN, J. A. L. Commonwealth income tax law and practice: by J. A. L. Gunn in collaboration with O. E. Berger, R. E. O'Neill and M. Maas: 5th ed. Syd., Butterworth, 1957.
- Guide to Commonwealth income tax: by J. A. L. Gunn and R. E. O'Neill (8th ed.). Syd., Butterworth, 1955. 40s.
- HARRISON, W. N. L. Cases on land law: selected and ed. by W. N. Harrison. Syd., Law Book Co., 1958. 95s. Published at the request of the Australian Universities Law Schools Association.
- JOSKE, P. E. The law of partnership in Australia and New Zealand. Syd., Butterworth, 1957. 32s. 6d.
- The laws of marriage and divorce in Australia and New Zealand (3rd ed.). Syd., Butterworth, 1952. 140s.
- MAZENGARB, O. C. The law and practice relating to actions for negligence on the highway: (3rd ed.) Syd., Butterworth, 1957.
- MITCHELL, R. E. Hire-purchase law . . . annotated and explained together with a comparative table of sections of the various hire-purchase agreement acts of England, New Zealand and the Australian States (2nd ed.). Syd., Law Book Co., 1955. 50s.
- NOLAN, J. R. W. Nolan and Cohen's industrial laws annotated: bk. 1: federal law: (2nd ed.): by C. P. Mills. Syd., Butterworth, 1957.
- PORTUS, J. H. The development of Australian trade union law. Melb., Melbourne Univ. Press, 1958, 57s. 6d.
- RUOFF, T. B. F. An Englishman looks at the Torrens system (being some provocative essays on the operation of the system after one hundred years). Syd., Law Book Co., 1957.
- SELETO, B. Laws of gift and estate duties of the Commonwealth of Australia and the conventions with the United States of America (3rd ed.): by Bernard Seletto and O. M. L. Davies. Syd., Butterworth, 1955. 50s.
- STONE, J. Aggression and world order: a critique of United Nations theories of aggression. Syd., Maitland Publications, 1958. 40s.
- WEBB, L. C. Legal personality and political pluralism. Melb., Melbourne Univ. Press on behalf of Australian National University 1958. 30s. (Australian National University, Canberra. Social science monographs, 12.)
- YORSTON, R. K. Australian mercantile law: by R. Yorston and E. E. Fortescue (9th ed.). Syd., Law Book Co., 1957. 45s.
- Limited liability companies in Australia: some aspects of control: a study of the development, control and management of limited liability companies in Australia including an outline of the functions of a board of directors. Syd., Law Book Co., 1956. 42s.

## Political History and International Relations.

## STANDARD WORKS IN PRINT.

- AUSTRALIAN INSTITUTE OF POLITICAL SCIENCE—*Victorian group*—*Winter forum*, Melbourne, 1953. The Australian political party system: by S. R. Davis (and others). Syd., Angus & Robertson, 1954. 12s. 6d.
- AUSTRALIAN JOURNAL OF POLITICS AND HISTORY. Brisb., Univ. of Queensland Press, 1955 to date. 12s. 6d. *per issue*.
- AUSTRALIAN OUTLOOK (INCORPORATING THE AUSTRAL-ASIATIC BULLETIN): v. 1 to date. Syd., Australian Institute of International Affairs, 1947 to date. Quarterly. 5s. *per issue*.
- AUSTRALIAN QUARTERLY: a quarterly review of Australian affairs: No. 1 to date. Syd., Australian Institute of Political Science, 1929 to date. 4s. *per issue*.
- CRISP, L. F. The Australian federal labour party, 1901-1951. Lond., Longmans, Green, 1953. 25s.
- CURRENT NOTES ON INTERNATIONAL AFFAIRS: v. 1 to date. Canb., Dept. of External Affairs, 1936 to date. Monthly. *gratis*.
- DEAKIN, Rt. Hon. A. The federal story: the inner history of the federal cause: foreword by the Rt. Hon. W. A. Watt: ed. by Herbert Brookes. Melb., Robertson & Mullens, 1944. 12s. 6d.
- EGGLESTON, Sir FREDERIC. Reflections of an Australian liberal. Melb., Cheshire for the Australian National University, 1952. 27s. 6d.
- Reflections on Australian foreign policy. Melb., Cheshire, 1957. 30s.
- EVATT, Rt. Hon. H. V. Australian labour leader: the story of W. A. Holman and the labour movement (3rd ed.). Syd., Angus & Robertson, 1954. 30s.
- GREENWOOD, G., ed. Australia in world affairs, 1950-55: ed. by Gordon Greenwood and Norman Harper. Melb., Cheshire, 1957. 45s.
- PARLIAMENTARY HANDBOOK OF THE COMMONWEALTH OF AUSTRALIA. Canb., Commonwealth National Library, 1915 to date. 42s. *per issue*. Latest issue: 12th, 1957.

## RECENT PUBLICATIONS OF INTEREST.

- AUSTRALIAN INSTITUTE OF POLITICAL SCIENCE—*21st Summer School*, Canberra, 1955. Liberty in Australia: papers: ed. by John Wilkes. Syd., Angus & Robertson, 1955. 16s. Papers on various aspects of democratic life.
- DAVIES, A. F. Australian democracy: an introduction to the political system. Melb., Longmans, Green, 1958. 19s. 6d.
- DEAKIN, Rt. Hon. A. The crisis in Victorian politics, 1879-1881: a personal retrospect: ed. by J. A. La Nauze and R. M. Crawford. Melb., Melbourne Univ. Press, 1957. 25s.
- ELLIS, U. R. The Country Party: a political and social history of the party in New South Wales. Melb., Cheshire, 1958. 32s. 6d.
- LANG, J. T. I remember. Syd., Invincible, 1956. 21s. Autobiography of one of Australia's most forceful and controversial Labour leaders, who was Premier of New South Wales from 1920 to 1927 and from 1930 to 1932.
- MENZIES, Rt. Hon. R. G. Speech is of time: selected speeches and writings. Lond., Cassell, 1958. 18s.

## Political History and International Relation—continued.

## RECENT PUBLICATIONS OF INTEREST—continued.

- NATION: an independent journal of opinion: No. 1, Sept. 26, 1958. Syd., National Review Company, 1958 to date.
- OBSERVER: No. 1, Feb. 22, 1958. Syd., Australian Consolidated Press, 1958 to date.
- RAWSON, D. W. Politics in Eden-Monaro: by D. W. Rawson and Susan Holtzinger. Lond., Heinemann for Australian National University, 1958. 22s. 6d. (Australian National University. Social science monographs, 11.)
- SAWER, G. Australian federal politics and law 1901-1929. Melb., Melbourne Univ. Press, 1956. 57s. 6d.
- WALLACE, V. H. Paths to peace: a study of war, its causes and prevention. Melb., Melbourne Univ. Press, 1957. 25s.
- WHITTINGTON, D. The house will divide: a review of Australian federal politics in the past twenty-five years. Melb., Georgian House, 1954. 22s. 6d.
- Ring the bells: a dictionary of Australian federal politics. Melb., Georgian House, 1956. 21s.
- WILDAVSKY, A. The 1926 referendum: by Aaron Wildavsky; The fall of the Bruce-Page government: by Dagmar Carboch: introd. by Henry Mayer. Melb., Cheshire, 1958. 40s.
- WOODRUFF, W. The Suez Canal and the Australian economy: (by) W. Woodruff & L. McGregor. Melb., Melbourne Univ. Press, 1957. 2s. 6d.

## Economic and Social Conditions.

## STANDARD WORKS IN PRINT.

- ARNDT, H. W. The Australian trading banks. Melb., Cheshire, 1957. 27s. 6d.
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- AUSTRALIA—*Treasury, Department of the.* Australia: an economic survey. Canb., Govt. Pr. 1956 to date.
- AUSTRALIAN FINANCIAL REVIEW. Syd., Sydney Morning Herald, 1951 to date. Weekly. 1s. 6d. per issue.
- COMMONWEALTH BANK OF AUSTRALIA. Statistical bulletin: v. 1 to date. Syd., 1937 to date. Monthly.
- DOWNING, R. I. National income and social accounts: an Australian study (2nd ed.). Melb., Melbourne Univ. Press, 1957. 6s.
- ECONOMIC RECORD: the journal of the Economic Society of Australia and New Zealand. Melb., Melbourne Univ. Press, 1925 to date. Bi-annual. 13s. 6d. per issue.
- ELKIN, A. P., ed. Marriage and the family in Australia. Syd., Angus and Robertson, 1957. 27s. 6d.
- GIBLIN, L. F. The growth of a central bank: the development of the Commonwealth Bank of Australia, 1924-1945. Melb., Melbourne Univ. Press, 1951. 30s.
- GIFFORD, J. R. K. Australian banking: by J. K. Gifford, J. Vivian Wood and A. J. Reitsma (3rd ed.). Brisb., Univ. of Queensland Press, 1958. 52s. 6d.
- Tew, J. H. B. Wealth and income: an analysis of the economic and financial systems of Australia and Great Britain (2nd ed.). Melb., Melbourne Univ. Press, 1955. 30s.

## RECENT PUBLICATIONS OF INTEREST.

- AUSTRALIA—*Trade, Department of—Industries Division.* Income tax for the manufacturer. Melb., Govt. Pr., 1958.
- AUSTRALIA AND NEW ZEALAND BANK LIMITED—*Economics and Statistical Department.* Australia's continuing development: an introduction to the more important aspects of the Australian economy: 3rd ed. (Melb.) Australia and New Zealand Bank Limited (and) Australia and New Zealand Savings Bank Limited (1958) gratis.
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- AUSTRALIAN INSTITUTE OF MANAGEMENT—*Melbourne division.* Is Australia developing too fast? Melb., 1956. Papers for General management residential conference, Hotel Manyung, Mt. Eliza, 11-13th November, 1956.
- AUSTRALIAN INSTITUTE OF POLITICAL SCIENCE—*22nd Summer School, Canberra, 28th to 30th Jan., 1956.* Australia's transport crisis: ed. by John Wilkes. Syd., Angus & Robertson, 1956. 22s. 6d.
- BLAINNEY, G. Gold and paper: a history of the National Bank of Australasia Limited. Melb., Georgian House, 1958.
- CLARK, C. G. Australian hopes and fears. Lond., Hollis & Carter, 1957.
- The conditions of economic progress: (3rd ed.) Lond., Macmillan, 1957. 70s.
- The cost of living. Lond., Hollis & Carter, 1957.
- CONNELL, W. F. Growing up in an Australian city: a study of adolescents in Sydney: by W. F. Connell, E. P. Francis, Elizabeth E. Skilbeck and a group of Sydney University students. Melb., Australian Council for Educational Research, 1957. (A.C.E.R. research series, no. 72). 30s.
- COPLAND, Sir Douglas, ed. The conflict of expansion and stability: documents relating to Australian economic policy 1945-52: ed. by D. B. Copland and R. H. Barback. Melb., Cheshire, 1957. 67s. 6d.
- ECONOMIC SOCIETY OF AUSTRALIA AND NEW ZEALAND—*N.S.W. Branch.* Developments in monetary policy. Syd., 1956. 5s.
- ELLIS, M. H. The torch: a picture of Legacy. Syd., Angus and Robertson, 1957. 20s.
- HALL, A. R. Australian company finance: sources and uses of funds of public companies, 1946-1955. Canb., Australian National University, 1956. 32s. 6d. (Australian National University. Social science monographs, no. 2.)
- HILL, M. R. Housing finance in Australia, 1945-1956. Canb., Australian National University, 1959. 45s.
- HUDSON, Harry. Flynn's flying doctors: an artist's journey through the outback and the story of the flying doctor service in Australia. Melb., Heinemann, 1956. 25s.
- INGLIS, K. S. Hospital and community: a history of the Royal Melbourne Hospital. Melb., Melbourne Univ. Press, 1958. 30s.
- JONES, E. H. Principles and practice of industrial and commercial organization in Australia. Syd., Law Book Co., 1957. 32s. 6d.

## Economic and Social Conditions—continued.

## RECENT PUBLICATIONS OF INTEREST—continued.

- LABOUR-MANAGEMENT CONFERENCE, 2nd, *University of Western Australia*, Oct. 27-28, 1956. Automation: addresses to the . . . conference . . . : ed. by K. F. Walker. Nedlands (W.A.), Univ. of Western Australia Press, 1957. 5s.
- LAFITTE, P. Social structure and personality in the factory. Lond., Routledge & K. Paul, 1958. 24s. (Melbourne University. Department of Psychology. Studies of social behaviour, no. 4.)
- LODEWYCK, A. People for Australia: a study in population problems. Melb., Cheshire, 1956. 30s.
- LORD, F. Fire alarm. Lond., Longmans, Green, 1957. 18s. A study of arson, giving numerous instances of actual cases both in Australia and overseas.
- MACKAY, I. K. Broadcasting in Australia. Melb., Melbourne Univ. Press, 1957. 25s.
- MACPHERSON, R. K. Environmental problems in tropical Australia: report of a survey of living conditions in tropical Australia with special reference to the Northern Territory and New Guinea. Canb., Govt. Pr., 1956.
- PERKINS, J. O. N. Sterling and regional payments systems. Melb., Melbourne Univ. Press, 1956. 30s.
- PLAYFORD, T. Free enterprise under changing economic conditions: William Queale memorial lecture. Adel., Australian Institute of Management, Adelaide Division, 1957.
- QUEENSLAND UNIVERSITY—*Faculty of Education*. Directory of social services, Queensland: comp. by the Social work staff of the Faculty of Education. Brisb., Univ. of Queensland Press, 1958. 15s.
- SCOTT, W. Australia and the challenge of change: being a study of the second industrial revolution and its possible effects upon Australia. Syd., Law Book Co., 1957. 75s.
- WALKER, K. F. Industrial relations in Australia. Camb. (Mass.), Harvard Univ. Press, 1956. 73s. 6d. (Wetherem publications in industrial relations.)
- WHEELWRIGHT, E. L. Ownership and control of Australian companies. Syd., Law Book Co., 1957. 42s.
- YORSTON, R. K., ed. The Australian commercial dictionary: being definitions of accounting, business and legal words, phrases, and abbreviations: associate eds. L. Goldberg, D. M. Hocking and J. P. C. Watson: 3rd ed. Syd., Law Book Co., 1957. 27s. 6d.

## Industries, Resources and Trade.

## STANDARD WORKS IN PRINT.

- ANDREWS, J. *Australia's resources and their utilization* (4th ed.). Syd., Department of Tutorial Classes, University of Sydney, 1953. 6s.
- AUSTRALASIAN INSTITUTE OF MINING AND METALLURGY. *Proceedings*: new series: No. 1 to date. Melb., 1912 to date. Quarterly.
- AUSTRALASIAN MANUFACTURER ANNUAL. Syd., Manufacturer Publishing Co., 1931 to date.
- AUSTRALIA—*Agricultural Economics, Bureau of*. Quarterly review of agricultural economics: No. 1 to date. Canb., 1948 to date.
- AUSTRALIA—*National Development, Department of*. Atlas of Australian resources. Canb., 1953. 20 maps of the proposed 30 have been published: Rainfall, Soils, Underground water, Temperatures, Mineral deposits, Climatic regions, Major developmental projects, Agricultural production, State and local government areas, Roads and aerodromes, Railways, Physical features, Population, Increase and decrease 1933-1947, 1947-1954, Forest resources, Population density and distribution, Power and fuel, Distribution of stock, Vegetation regions, Drainage systems, Conservation of surface water. 10s. 6d. ea., linen-stripped, 12s. 6d. ea. These maps are accompanied by a commentary, which is included in the price.
- Report of the Murray Valley Resources Survey Committee on resources and development of the Murray Valley. Melb. 40s.
- AUSTRALIA—*National Development, Department of—Division of Industrial Development*. The structure and capacity of Australian manufacturing industries. Melb., 1952. 60s.
- AUSTRALIA TO-DAY: special number of the Australian Traveller. Melb., United Commercial Travellers Association of Australia, 1905 to date. Annual. 2s. per issue.
- BEATTIE, W. A. A survey of the beef-cattle industry of Australia. Melb., C.S.I.R.O., 1956. (C.S.I.R.O. bulletin: no. 278.)
- CALLAGHAN, A. R. The wheat industry in Australia: by A. R. Callaghan and A. J. Millington. Syd., Angus and Robertson, 1956. 63s.
- DAVIDSON, F. G. The industrialization of Australia. Melb., Melbourne Univ. Press, 1957. 3s. 6d.
- EMPIRE MINING AND METALLURGY CONGRESS, 5th, *Australia and New Zealand*, 1952. Publications. Melb., A'sian Institute of Mining and Metallurgy, 1953.
- GREAT BRITAIN—*Commercial Relations and Exports Department*. Australia: economic and commercial conditions in Australia. Lond., H.M.S.O., 1921 to date. Latest issue: 1954.
- JAMES, W. Wine in Australia: a handbook (2nd ed.). Melb., George House, 1955. 21s.
- MAJOR DEVELOPMENTAL PROJECTS: Australia. Canb., Department of National Development, 1954 to date.
- NEW SOUTH WALES—*Premier's Department* . . . Preliminary survey of resources (of various regions). Syd., Govt. Pr., 1945 to date.
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- NICHOLSON, D. F. Australia's trade relations: an outline history of Australia's overseas trading arrangements. Melb., Cheshire, 1955. 42s.
- PASTORAL REVIEW AND GRAZIERS' RECORD. Melb., Pastoral Review, 1891 to date. 45s. per annum.
- ROUGHLEY, T. C. Fish and fisheries of Australia (3rd ed.). Syd., Angus & Robertson, 1953. 50s.
- SHANNON, I. Rural industries in the Australian economy. Melb., Cheshire, 1955. 22s. 6d.
- VICTORIA—*Central Planning Authority*. Resources survey. Melb., 1948 to date. Surveys for the following regions have so far been published: Loddon, Mallee, Merri, Goulburn, Upper Goulburn, Murray; Upper Murray; Central Highlands.
- WILLS, N. R., ed. Australia's power resources: papers read at the 1954 winter forum of the Victorian group of the Australian Institute of Political Science: by H. Messel (and others). Melb., Cheshire, 1955. 18s. 6d.

Industries, Resources and Trade—*continued.*

## RECENT PUBLICATIONS OF INTEREST.

- ALLBUTT, G. A brief history of some of the features of public electricity supply in Australia and the formation and development of the Electricity Supply Association of Australia, 1918–1957. Melb., Electricity Supply Association of Australia, 1958.
- AUSTRALIA—*Mineral Resources, Geology and Geophysics, Bureau of.* Mineral resources of Australia: summary reports. Canb., Govt. Pr., 1942 to date.
- AUSTRALIA—*Trade, Department of.* Developments in Australian manufacturing industry. Melb., 1957.
- AUSTRALIAN INSTITUTE OF POLITICAL SCIENCE—*23rd Summer School, Canberra, 1957.* Productivity and progress: (papers ed. by John Wilkes). Syd., Angus and Robertson, 1957. 25s.
- AUSTRALIAN MEAT BOARD. The meat export industry in Australia. Lond., 1956.
- BARNARD, A. The Australian wool market, 1840–1900. Melb., Melbourne Univ. Press on behalf of the Australian National University, 1958. 35s.
- COLONIAL SUGAR REFINING COMPANY LTD. South Pacific enterprise: the Colonial Sugar Refining Company Limited. Syd., Angus & Robertson, 1956. 42s.
- CORISH, R. C. To-morrow's secretary. Melb., Pitman, 1958. 13s. 6d.
- DOUGLAS, I. Opportunity in Australia. Lond., Rockliff, 1958. 21s.
- GUTHRIE, J. F. A world history of sheep and wool. Melb., McCarron Bird, 1957. 45s.
- KEMPE, H. C. The astonished earth: forward by Sir R. George Stapledon: illus. drawings by John C. Goodchild. Melb., Heinemann, 1958. 30s.
- PHILLIPS, H. A survey of fellmongering, calf skin and hide production and leather manufacture in New Zealand and Australia. Egham, Surrey, British Leather Manufacturer's Research Association, 1957. 7s. 6d.
- SHERARD, H. M. Australian road practice: an introduction to highway engineering. Melb., Melbourne Univ. Press, 1958. 105s.
- STANDARDS ASSOCIATION OF AUSTRALIA—*Power Survey Sectional Committee.* A report on the coal resources of the Commonwealth of Australia: 2nd. ed. Syd., 1955. 25s.
- TWOHILL, R. J. J. Epitome of dairying industry organizations in Australia. Syd., Commonwealth Dairy Produce Equalization Committee, 1956.
- WADHAM, Sir SAMUEL M. Land utilization in Australia: 3rd ed. by Sir Samuel Wadham, R. Kent Wilson and Joyce Wood. Melb., Melbourne Univ. Press, 1957. 40s.
- WALLIS, N. A. Australian timber handbook. Syd., Timber Development Association of Australia, 1956. 25s.
- WARD, L. K. Underground water in Australia. Melb., Tait Publishing Co., 1952. 12s. 6d.
- WILLIAMS, D. B. Economic and technical problems of Australia's rural industries. Melb., Melbourne Univ. Press, 1957. 27s. 6d.
- YEOMANS, P. A. The challenge of landscape: the development and practice of keyline. Syd., Keyline Publishing Co., 1958. 79s. 6d. An account of the results of a new method of soil conservation and pasture improvement.
- ZIEGLER, O. L. Snowy saga: produced by Oswald L. Ziegler for the Council of the Shire of Snowy River and the Snowy Mountains Hydro Electric Authority. Syd., Oswald Ziegler Publications Pty. Ltd., 1956. 19s.

## Science and Technology.

## STANDARD WORKS IN PRINT.

- AUSTRALIA—*Commonwealth Scientific and Industrial Research Organization.* A manual of Australian soils: by C. G. Stephens. Melb., 1953. 25s.
- AUSTRALIA—*Meteorology, Bureau of.* Climatological atlas of Australia. Melb., 1940. 10s. 6d.
- AUSTRALIAN ACCOUNTANCY PROGRESS. Syd., Butterworth, 1954 to date. Annual. 47s. 6d.
- AUSTRALIAN JOURNAL OF BIOLOGICAL SCIENCES. Melb., C.S.I.R.O., 1951 to date. Quarterly. 40s. per annum.
- AUSTRALIAN JOURNAL OF CHEMISTRY. Melb., C.S.I.R.O., 1951 to date. Quarterly. 40s. per annum.
- AUSTRALIAN JOURNAL OF EXPERIMENTAL BIOLOGY AND MEDICAL SCIENCE. Adel., Medical Sciences Club, University of Adelaide, 1924 to date. Bi-monthly. 60s. per annum.
- AUSTRALIAN JOURNAL OF PHYSICS. Melb., C.S.I.R.O., 1951 to date. Quarterly. 40s. per annum.
- AUSTRALIAN JOURNAL OF SCIENCE. Syd., Australian National Research Council, 1938 to date. Monthly. 40s. per annum.
- AUSTRALIAN VETERINARY JOURNAL. Syd., Australian Veterinary Association. Monthly. 1925 to date. 60s. per annum.
- AUSTRALIAN ZOOLOGIST. Syd., Royal Zoological Society of N.S.W., 1914 to date. Annually. 12s. 6d. per issue.
- CLARK, J. The formicidae of Australia: v. 1. Melb., C.S.I.R.O., 1952.
- DAVID, Sir T. W. Edgeworth. Geology of the Commonwealth of Australia: ed. and much supplemented by W. R. Browne. Lond., E. Arnold, 1950. 252s.
- INSTITUTION OF ENGINEERS OF AUSTRALIA. Journal. Syd., 1929 to date. Monthly. 84s. per annum.
- LASERON, C. F. Ancient Australia: the story of its past geography and life. Syd., Angus & Robertson, 1954. 25s.
- The face of Australia: the shaping of a continent: maps and sketches by the author (2nd ed.). Syd., Angus & Robertson, 1954. 21s.
- MCLUCKIE, J. Australian and New Zealand botany: by John McLuckie and H. S. McKee. Syd., Associated General Publications, 1954. 84s.
- MEDICAL JOURNAL OF AUSTRALIA. Syd., A'sian Medical Pub. Co., 1856 to date. Weekly. 100s. per annum.
- MUELLERIA. (Melb.) National Herbarium, 1955 to date.
- MUSGRAVE, A., *comp.* Bibliography of Australian entomology: 1775–1930. Syd., Royal Zoological Society of New South Wales, 1932. 10s.
- REHN, A. G. The grasshoppers and locusts (acripoidea) of Australia: v. 1–3. Canb., C.S.I.R.O., 1957.
- ROBERTS, F. H. S. Insects affecting live-stock with special reference to important species occurring in Australia. Syd., Angus & Robertson, 1952. 45s.
- See also publications of Australian and New Zealand Association for the Advancement of Science, Australian Institute of Agricultural Science, Commonwealth Scientific and Industrial Research Organization, Commonwealth Bureau of Mineral Resources, Commonwealth Solar Observatory, Royal Australian Chemical Institute, the Royal Societies, the Universities, the scientific institutions, and works under the headings *Aborigines* and *Natural History* in this list.

Science and Technology—*continued.***RECENT PUBLICATIONS OF INTEREST.**

- BELSCHNER, H. G.** Sheep management and diseases: 5th ed. Syd., Angus and Robertson, 1957. 75s. (Agricultural and livestock series.)
- BOX, B. J.** The astronomer's universe. Melb., Melbourne Univ. Press on behalf of the Australian National University, 1958. 21s. Based on lectures given at the Canberra University College, Oct., 1957, and at the Summer School, School of Physics, University of Sydney, Jan. 1958.
- BRITTON, E. B.** A revision of the Australian chafers: coleoptera, scarabaeidae, melonthinae: v. 1. Lond. British Museum (Natural History), 1957.
- BUTLER, S. T.** Nuclear stripping reactions: by S. T. Butler in association with O. H. Hittmair. Syd., Horwitz Publications, 1957.
- CANCER CAMPAIGN APPEAL—Women's Committee.** We cook at home. Melb., 1958. 21s. A collection of the favourite recipes of well known hostesses and gourmets.
- EDWARDS, R. G.** The Australian garden book: with practical hints on the culture of all the principal flowers, bulbs, shrubs, trees, fruits and vegetables. Syd., Angus and Robertson, 1958. 50s.
- ELLISON, N.** Flying Matilda: early days in Australian aviation. Syd., Angus and Robertson, 1957. 22s. 6d.
- FLOREY, Sir HOWARD W.** General pathology: based on lectures delivered at the Sir William Dunn School of Pathology, University of Oxford: 2nd ed. Lond., Lloyd-Luke, 1958. 84s.
- GANDEVIA, B.** An annotated bibliography of the history of medicine in Australia. Syd., A'sian Medical Pub. Co., 1957 (British Medical Association in Australia—*Federal Council*. Monographs, No. 1).
- GLASGOW, R. E.** From range to ring: illus. with photographs by the author: foreword by Sir Charles Gardiner. Perth, Imperial Printing Co., 1957. 63s. A well illustrated work on horse training.
- GEOLOGICAL SOCIETY OF AUSTRALIA—South Australian Division.** The geology of South Australia: prepared by members of the South Australian Division of the Geological Society of Australia: ed. by M. F. Glaessner and L. W. Parkin. Melb., Melbourne Univ. Press on behalf of the Geological Society of Australia, 1958. 42s. Originally published as v. 5, pt. 2 of the Journal of the Geological Society of Australia.
- HUTCHINSON, R. C.** Food for better performance. Melb., Melbourne Univ. Press, 1958. 13s. 6d.
- McWHAHE, J. R. H.** The stratigraphy of Western Australia: by J. R. H. McWhae, P. E. Playford, A. W. Lindner and others. Melb., Melbourne Univ. Press on behalf of the Geological Society of Australia, 1958. 45s. Originally published as v. 4, pt. 2 of the Journal of the Geological Society of Australia.
- NEW SOUTH WALES—Smoke Abatement Committee.** Report on air pollution in New South Wales. Syd., Govt. Pr., 1958.
- RYAN, L. D.** Sheep-shearing experting. Syd., Angus and Robertson, 1957. 45s.
- SIERP, A. F.** Applied perspective: the theory and practice of perspective for architects, industrial designers, artists and draftsmen. Syd., Angus and Robertson, 1958. 35s.
- SPECHT, R. L., ed.** Records of the American-Australian scientific expedition to Arnhem Land: v. 3, Botany and plant ecology: ed. by R. L. Specht and C. P. Mountford. Melb., Melbourne Univ. Press, 1958. 126s.
- TEAKLE, L. J.** Fertilizers for the farm and garden: by L. J. H. Teakle and R. A. Boyle. Syd., Angus and Robertson, 1958. 63s. (Agricultural and livestock series.)
- TITERTON, E. W.** Facing the atomic future: foreword by Professor M. L. Oliphant. Melb., Cheshire, 1956. 32s. 6d.
- TORY, B. E.** Offset lithography. Syd., Horwitz Publications, 1957.

## Natural History.

**STANDARD WORKS IN PRINT.**

- AUSTRALIA—Commonwealth Forestry and Timber Bureau.** Forest trees of Australia. Canb., 1957. 42s.
- AUSTRALIAN MUSEUM MAGAZINE.** Syd., 1921 to date. Quarterly. 9s. per annum.
- BARRETT, C. L.** Butterflies of Australia and New Guinea: by C. L. Barrett and A. N. Burns. Melb., Seward, 1952. 55s.
- Wild life of Australia and New Guinea. Lond., Heinemann, 1954. 18s. 6d.
- CAYLEY, N. W.** What bird is that? a guide to the birds of Australia. Syd., Angus & Robertson, 1951. 30s.
- DAKIN, W. J.** Australian seashores: a guide for the beach-lover, the naturalist, the shore fisherman, and the student: by William J. Dakin, assisted by Isobel Bennett and Elizabeth Pope. Syd., Angus & Robertson, 1952. 45s.
- HARRIS, THISTLE Y.** Wild flowers of Australia (4th ed.). Syd., Angus & Robertson, 1956. 42s. First published in 1938.
- KINGHORN, J. R.** The snakes of Australia: new ed. Syd., Angus & Robertson, 1956. 25s.
- LEACH, J. A.** Australian nature studies: a book of reference for those interested in nature study (3rd ed.): rev. by E. Byrne. Melb., Macmillan, 1952. 30s.
- NICHOLLS, W. H.** Orchids of Australia: drawn in natural colour by W. H. Nicholls with descriptive text: (introd. by C. T. White). Melb., Georgian House, 1951. 3 pts. 150s. each.
- PATTON, R. T.** Know your own trees: a short introduction to the study of our common eucalypts (2nd ed.). Melb., Melbourne Univ. Press, 1954. 5s. 6d.
- ROUGHLEY, T. C.** Wonders of the Great Barrier Reef: (2nd ed.) Syd., Angus and Robertson, 1951. 30s.
- TROUGHTON, E. Le G.** Furred-animals of Australia (3rd ed.). Syd., Angus & Robertson, 1951. 30s.

**RECENT PUBLICATIONS OF INTEREST.**

- BELL, A.** Some common Australian birds: by Allan and Shirley Bell. Melb., Oxford Univ. Press, 1956. 35s.
- GATTY, H.** Nature is your guide: how to find your way on land & sea: foreword by J. H. Doo little: illus. by Francis Lee Jaques, Douglas Woodall & others. Lond., Collins, 1958. 26s.
- HARRIS, THISTLE Y., ed.** Naturecraft in Australia: an introductory handbook to the fauna and flora and to the Australian environment for the use of the bushwalker, student, teacher, field naturalist and conservationist. Syd., Angus & Robertson, 1956. 25s.
- IRDALE, T.** Birds of New Guinea. Melb., Georgian House, 1956. 2 v. 504s.
- McKEOWN, K. C.** Australian spiders: their lives and habits (2nd ed.). Syd., Angus & Robertson, 1952. 21s.
- MONKMAN, N.** Escape to adventure. Syd., Angus & Robertson, 1956. 25s. The experiences of an underwater photographer in the Australian tropics.

## Natural History—continued.

## RECENT PUBLICATIONS OF INTEREST—continued.

- MORRISON, P. C. Melbourne's garden: a descriptive and pictorial record of the Botanic Gardens, Melbourne (2nd ed.). Melb., Melbourne Univ. Press, 1957. 30s.  
 SERVENTY, V. Australia's great barrier reef: a handbook on the corals, shells, crabs, larger animals and birds with some remarks on the reef's place in history. Melb., Georgian House, 1955. 13s. 6d.  
 SHARLAND, M. Tasmanian birds: a field guide to the birds inhabiting Tasmania and adjacent islands, including the sea birds: (3rd i.e. 2nd ed.), Syd., Angus and Robertson, 1958. 21s.  
 WORRELL, E. Dangerous snakes of Australia: a handbook for bushmen, bush-walkers, mission workers, servicemen, boy scouts, New Australians, and naturalists on the identification and venoms of Australian snakes with directions for first aid treatment of snake-bite. Syd., Angus & Robertson, 1956. 12s. 6d.

## Aboriginals.

## STANDARD WORKS IN PRINT.

- BERNDT, R. M. Arnhem land: its history and its people: by Ronald M. Berndt and Catherine H Berndt. Melb., Cheshire, 1953. 30s.  
 ——— From black to white in South Australia: by Ronald and Catherine Berndt. Melb., Cheshire, 1951. 37s. 6d.  
 ELKIN, A. P. The Australian aborigines: how to understand them (3rd ed.). Syd., Angus & Robertson, 1954. 30s.  
 HASLUCK, Hon. P. M. C. Native welfare in Australia: speeches and addresses. Perth, Paterson Brokensha, 1953. 5s.  
 MCCARTHY, F. D. Australia's aborigines: their life and culture. Melb., Colorgravure, 1957. 170s.  
 MOUNTFORD, C. P. Records of the American-Australian scientific expedition to Arnhem Land: v. 1, Art, myth and symbolism. Melb., Melbourne Univ. Press, 1956. 126s.  
 OCEANIA: a journal devoted to the study of the native peoples of Australia, New Guinea and the islands of the Pacific Ocean. Syd., University of Sydney, 1930 to date. Quarterly. 40s. per annum.  
 PARKER, K. L. Australian legendary tales: collected by K. Langloh Parker: selected and edited by H. Drake-Brockman: illus. by Elizabeth Durack. Syd., Angus & Robertson, 1953. 25s.

## RECENT PUBLICATIONS OF INTEREST.

- AUSTRALIA—Territories, Department of. Our aborigines: prepared under the authority of the Minister for Territories, with the co-operation of the Ministers responsible for aboriginal welfare in the Australian States. Canb., Govt. Pr., 1957.  
 ——— Progress towards assimilation: aboriginal welfare in the Northern Territory. Canb., 1958.  
 CHASELING, W. S. Yulengor: nomads of Arnhem Land. Lond., Epworth Press, 1957. 21s.  
 ENDACOTT, S. J. Australian aboriginal words and place names and their meanings (9th ed.). Melb., Georgian House, 1955. 6s.  
 GARTRELL, MARJORIE. Dear primitive: a nurse among the aborigines. Syd., Angus and Robertson, 1957. 16s.  
 HARNEY, W. E. Life among the aborigines. Lond., Hale, 1957. 18s. The author, a well known identity in the Northern Territory for many years, is now caretaker of Ayers Rock, Central Australia.  
 LITTLE, S. KYLE. Whispering wind. Lond., Hutchinson, 1957. 22s. 6d. Experiences of a patrol officer among the aborigines of the Northern Territory.  
 MCCONNELL, URSULA H. Myths of the Munkan. Melb., Melbourne Univ. Press, 1957. 35s.  
 ROSE, R. Living magic: the realities underlying the psychical factors and beliefs of the Australian aborigines. Chicago, Rand, McNally, 1956. \$3.75.

## Art, Architecture, Music and Theatre.

## STANDARD WORKS IN PRINT.

- BADHAM, H. E. A gallery of Australian art: chosen and introd. by Herbert Badham. Syd., Currawong, 1954. 73s. 6d.  
 BARNETT, P. N. Australian book-plates and book-plates of interest to Australia. Syd., Beacon Press, 1950. 252s.  
 BOYD, R. Australia's home: its origins, builders and occupiers. Melb., Melbourne Univ. Press, 1952. 25s.  
 CASEY, MAIE, comp. Early Melbourne architecture: 1840–1888: comp. and ed. by Maie Casey and others. Melb., Oxford Univ. Press, 1953. 40s.  
 CATO, J. The story of the camera in Australia. Melb., Georgian House, 1955. 126s.  
 GODDARD, R. H. Australian landscapes in miniature. Syd., Legend Press, 1952. 12s. 6d.  
 HALL, H. B. Ballet in Australia from Pavlova to Rambert. Melb., Georgian House, 1948. 105s.  
 HERMAN, M. E. The early Australian architects and their work: illus. and decorated by the author. Syd., Angus & Robertson, 1954. 84s.  
 HOFF, URSULA. Masterpieces of the National Gallery of Victoria. Melb., Cheshire, 1949. 70s.  
 MCGUIRE, D. P. The Australian theatre . . . by D. P. McGuire, B. Arnott and F. M. McGuire. Melb., Oxford Univ. Press, 1948. 12s. 6d.  
 MEMORIAL VOLUME TO HOWARD HINTON, patron of art. Syd., Angus & Robertson, 1951. 42s.  
 ORCHARD, W. A. Music in Australia: more than 150 years of development. Melb., Georgian House, 1952. 30s.

## RECENT PUBLICATIONS OF INTEREST.

- ANDERSON, H. Australian song index, 1828–1956. Ferntree Gully, Vic., Rams Skull Press, 1957. 18s.  
 AUSTRALIAN THEATRE YEAR BOOK: ed. by the Australian Elizabethan Theatre Trust. Melb., Cheshire, 1958 to date.  
 BENNETT, W. R. The art of Rubery Bennett: introd. by William Dargie. Syd., Angus & Robertson, 1954. 84s.  
 FEINT, A. Flower paintings. Syd., Ure Smith, 1948. 75s.  
 HERMAN, M. E. The architecture of Victorian Sydney: by Morton Herman assisted by Boyd Atkinson. Syd., Angus & Robertson, 1956. 84s.

Art, Architecture, Music and Theatre—*continued*.**RECENT PUBLICATIONS OF INTEREST—continued.**

- HEYSEN, H. Watercolours and drawings: text by Sir Lionel Lindsay and James S. MacDonald. Syd., Legend Press, 1952. 105s.
- MACKENZIE, ISABEL. The why and how of child art. Syd., Angus & Robertson, 1955. 15s.
- MACQUEEN, K. Adventure in watercolour. Syd., Legend Press, 1948. 63s.
- MISSINGHAM, H. Hal Missingham sketch book. Syd., Dymock's, 1954. 126s.
- OLYMPIC GAMES, 16th, *Melbourne Nov.-Dec., 1956—Organising Committee*. The arts festival of the Olympic Games, Melbourne. Melb., Olympic Civic Committee of the Melbourne City Council, 1956.
- ORBAN, D. A layman's guide to creative art. Syd., Edwards & Shaw, 1957. 25s.
- PRESTON, MARGARET. Margaret Preston's monotypes. Svd., Ure Smith, 1949. 75s.
- SMITH, B. W., ed. Education through art in Australia. Melb., Melbourne Univ. Press, 1958. 25s.
- WALKER, KATHERINE S. Robert Helpmann. Lond., Rockliff, 1957. 15s. (Theatre world monograph 9.)
- ZIEGLER, O. L., ed. Australian photography, 1957. Syd., Oswald Ziegler Publications, 1957.

## Sport.

**STANDARD WORKS IN PRINT.**

- COOMBE, D. C. History of the Davis Cup: being the story of the International Lawn Tennis Championship, 1900-48. Syd., A'sian Pub. Co., 1949. 17s. 6d.
- EDWARDS, S. H. Shooting and shooting bushcraft. Syd., Angus & Robertson, 1951. 7s. 6d.
- MACLAREN, T. M. The Australian golfer's handbook, 1957. Syd., Langside Pub. Co., 1957. 20s.
- MILLER'S SPORTING ANNUAL AND ATHLETIC RECORD. Melb., Herald & Weekly Times, 1918 to date. Annual. 5s. per issue.
- MISSINGHAM, H. Good fishing: a handy guide for Australia with illustrations of the most commonly caught fish. Syd., Dymock's, 1953. 10s. 6d.
- MOYES, A. G. Australian batsmen from Charles Bannerman to Neil Harvey. Syd., Angus & Robertson 1954. 18s. 6d.
- WINSER, K., comp. Wild game of Australia. Melb., Motor Manual Publications, 1953. 27s.

**RECENT PUBLICATIONS OF INTEREST.**

- BONDI SURF BATHERS' LIFE SAVING CLUB. History of Bondi Surf Bathers' Life Saving Club 1906-1956. Syd., 1956.
- BRADMAN, Sir DONALD G. The art of cricket. Lond., Hodder, 1958. 30s.
- D'OMBRAIN, A. Game fishing off the Australian coast. Syd., Angus and Robertson, 1957. 50s.
- DONALD, K. Olympic saga: the track and field story Melbourne, 1956: by Keith Donald and Don Selth. Syd., Futurian Press, 1957. 25s.
- FINGLETON, J. H. W. Masters of cricket from Trumper to May: foreword by R. G. Menzies. Lond., Heinemann, 1958. 15s.
- HOAD, L. A. My game: with Jack Pollard: forewords by Adrian Quist and Harry Hopman. Lond., Hodder and Stoughton, 1958. 22s. 6d.
- LECHENBERG, H. Olympische Spiele 1956: Cortena: Stockholm: Melbourne. Munchen, Coppers-Verlag, 1957. DM34.00.
- OLYMPIC GAMES, Melbourne, 1956. Melb., Colorgrature Publications, 1956.
- OLYMPIC GAMES, 16th *Melbourne, Nov.-Dec. 1956—Organising Committee*. The official report . . . for the Games of the XVI. Olympiad, Melbourne 1956. Melb., 1958.
- TAYLOR, E. C. H. 100 years of football: the story of the Melbourne Football Club, 1858-1958 written and ed. by E. C. H. Taylor: research by Hugh Field: photographs arranged by David Walker. Melb., Melbourne Football Club, 1957.
- VON NIDA, N. G. Golf is my business: by N. Von Nida with Muir McLaren. Lond. Muller, 1956. 16s.

## Literature and Language.

**\*CRITICISM, BIBLIOGRAPHY AND ANTHOLOGIES.****STANDARD WORKS IN PRINT.**

- ANNUAL CATALOGUE OF AUSTRALIAN PUBLICATIONS. Canb., Commonwealth National Library, 1936 to date. 6s. 6d. per issue.
- AUSTRALIAN POETRY. Syd., Angus & Robertson, 1941 to date. Annual. Various prices.
- COAST TO COAST: Australian stories. Syd., Angus & Robertson, 1943 to date. Annual. Various prices.
- CROWLEY, F. K. The records of Western Australia. Perth, Publications Committee of the University of Western Australia, 1953 to date. 84s. per v.
- FERGUSON, J. A. Bibliography of Australia: v. 1-4: 1784-1850. Syd., Angus & Robertson, 1941 to date. v. 1-2 o.p., v. 3, 126s., v. 4, 210s., v. 5 in preparation.
- GREEN, H. M. ed. Modern Australian poetry (2nd ed.). Melb., Melbourne Univ. Press, 1952. 17s. 6d.
- JINDYWOROBAK ANTHOLOGY. Melb., Georgian House for Jindyworobak Club, 1944 to date. Annual. Various prices.
- MACKANESS, G., comp. An anthology of Australian verse (2nd ed.). Syd., Angus & Robertson, 1952. 21s.
- MEANJIN: contemporary verse and prose. Melb., Melbourne Univ. Press, 1940 to date. Quarterly. 10s. per issue.
- MILLER, E. MORRIS. Australian literature: a bibliography to 1938: by E. Morris Miller: extended to 1950: ed. with historical outline and descriptive commentaries by F. T. Macartney. Syd., Angus & Robertson, 1956. 84s.
- MITCHELL, A. G. The pronunciation of English in Australia. Syd., Angus & Robertson, 1951. 8s. 6d. First published in 1946.

\* Excludes the works of individual authors, reference to which will be found in Miller, *Australian literature and Serle, An Australasian anthology*.

Literature and Language—*continued.*\*CRITICISM, BIBLIOGRAPHY AND ANTHOLOGIES—*continued.*STANDARD WORKS IN PRINT—*continued.*

- MURDOCH, W. L. F. A book of Australian and New Zealand verse (4th ed.) chosen by Walter Murdoch and Alan Mulgan. Melb., Oxford Univ. Press, 1956. 14s.  
 QUEENSLAND PUBLIC LIBRARY—*Oxley Memorial Library.* Bibliography of Queensland verse with biographical notes: by J. H. Hornibrook. Brisb., 1953. 15s.  
 RODERICK, C. An introduction to Australian fiction. Syd., Angus & Robertson, 1950. 12s. 6d.  
 SERLE, P., *comp.* An Australasian anthology: comp. by P. Serle, F. L. T. Wilmot and R. H. Croll (new ed.). Syd., Collins, 1946. 8s. 6d.  
 SOUTHERLY. Syd., Australian English Association, 1939 to date. Quarterly. 5s. *per issue.*  
 STEWART, D. A., *ed.* Australian bush ballads: ed. by Douglas Stewart and Nancy Keesing. Syd., Angus and Robertson, 1955. 30s.  
 ——— Old bush songs and rhymes of colonial times: enlarged and revised from the collection of A. B. Paterson: by Douglas Stewart and Nancy Keesing. Syd., Angus and Robertson, 1957. 25s.

## RECENT PUBLICATIONS OF INTEREST.

- AUSTRALIAN BROADCASTING COMMISSION—*Standing Committee on Spoken English.* A guide to the pronunciation of Australian place names. Syd., Angus and Robertson, 1957. 30s.  
 BUCKLEY, V. Essays in poetry, mainly Australian. Melb., Melbourne Univ. Press, 1957.  
 ELLIOTT, B. R. Marcus Clarke. Oxf., Clarendon Press, 1958. 35s.  
 FRANKLIN, STELLA M. M. L. Laughter, not for a cage: notes on Australian writing, with biographical emphasis on the struggles, function, and achievements of the novel in three half-centuries. Syd., Angus & Robertson, 1956. 25s.  
 HUNGERFORD, T. A. G. *ed.* Australian signpost: an anthology ed. for the Canberra Fellowship of Australian Writers by T. A. G. Hungerford. Melb., Cheshire, 1956. 18s. 6d. A collection of short stories, poetry, critical and historical essays and general articles.  
 LAVATER, L. The sonnet in Australasia: a survey and selection: ed. with foreword by Frederick T. Macartney (2nd ed.). Syd., Angus & Robertson, 1956. 25s.  
 MACARTNEY, F. T. Australian literary essays. Syd., Angus & Robertson, 1957. 21s.  
 MILLER, E. MORRIS. Australia's first two novels: origins and backgrounds. Hobart (Author), 1958.  
 MORRISON, R. H., *comp.* A book of South Australian verse. Adel., Mary Martin, 1957.  
 PURDIE, EDNA, *ed.* Henry Handel Richardson: some personal impressions: ed. by Edna Purdie and Olga M. Roncoroni. Syd., Angus and Robertson, 1957. 25s.  
 REES, G. L. Towards an Australian drama. Syd., Angus & Robertson, 1953. 18s.  
 RODERICK, C., *ed.* Australian round up: stories from 1790 to 1950: illus. by Broadhurst. Syd., Angus & Robertson, 1953. 21s.  
 THOMPSON, J., *jt. ed.* The Penguin book of Australian verse: selected and ed. by John Thompson, Kenneth Slessor and R. G. Howarth. Harmondsworth, Eng., Penguin Books, 1958. 3s.  
 WIGMORE, L. G. *ed.* Span: an adventure in Asian and Australian writing: ed. for the Canberra Fellowship of Australian Writers. Melb., Cheshire, 1958. 25s.  
 WRIGHT, JUDITH A., *comp.* New land, new language: an anthology of Australian verse. Melb., Oxford Univ. Press, 1957. 12s. 6d.

## Fiction.

## INCLUDES BOTH RECENT PUBLICATIONS AND REPRINTS OF WELL-KNOWN AUSTRALIAN WRITERS.

- ALDRIDGE, H. E. J. I wish he would not die. N.Y., Doubleday, 1958.  
 ASTLEY, THEA B. M. Girl with a monkey. Syd., Angus and Robertson, 1958. 13s. 6d.  
 BROWNE, T. A. Robbery under arms: a story of life in the bush and in the goldfields of Australia. Lond., Collins, 1954. 8s. First published in 1888.  
 CASEY, G. S. Snowball. Syd., Angus and Robertson, 1958. 17s.  
 CLEARY, J. S. The green helmet. N.Y., Morrow, 1958. \$3.50.  
 COWAN, P. The unploughed land: stories. Syd., Angus and Robertson, 1958. 16s.  
 DARK, ELEANOR. The timeless land. Syd., Collins, 1956. 16s. First published in 1941. The author continued this story of early Sydney in her *Storm of time* and *No barrier*.  
 FOOT, GRACE G. B. Leonora: an indomitable woman. Syd., Currawong, 1958. 17s. 6d.  
 FRANKLIN, STELLA M. M. L. All that swagger (2nd ed.) Syd., Angus & Robertson, 1956. 25s.  
 FURPHY, J. Such is life: being certain extracts from the diary of Tom Collins. Syd., Angus & Robertson, 1956. 25s. First published in 1903.  
 GRIFFIN, G. By the north gate. Syd., Angus and Robertson, 1958. 18s. 9d.  
 GUNN, JEANNIE. We of the Never-never. Melb., Robertson & Mullens, 1954. First published in 1908.  
 LAMBERT, E. The dark backward. Lond., Muller, 1958. 13s. 6d.  
 LAWSON, H. H. Prose works. Syd., Angus & Robertson, 1956. 30s. First published in 1935.  
 MACSWAN, N. The inn with the wooden door. Lond., Cassell, 1958. 12s. 6d.  
 NILAND, D. F. Call me when the cross turns over. Syd., Angus and Robertson, 1957. 17s. 6d.  
 O'GRADY, J. P. They're a weird mob: a novel by Nino Culotta. Syd., Ure Smith, 1957. 16s.  
 PALMER, E. V. Seedtime. Syd., Angus and Robertson, 1957. 17s.  
 PORTEOUS, R. S. Brigalow. Syd., Angus & Robertson, 1957. 17s.  
 PORTER, H. A handful of pennies. Syd., Angus and Robertson, 1958. 17s. 6d.  
 PRICHARD, KATHARINE S. Working bullocks. Syd., Angus & Robertson, 1956. 16s. First published in 1926.  
 RICHARDSON, H. H. The fortunes of Richard Mahony. Melb., Heinemann, 1951. 17s. 6d. First published in 1917.  
 ROBINSON, R. E. Black-feller, white-feller. Syd., Angus and Robertson, 1958. 15s. Short stories.  
 RUHEN, OLAF. Naked under Capricorn: a novel. Lond., Macdonald, 1958. 15s.  
 SCHLUNKE, E. O. The village Hampden: stories. Syd., Angus and Robertson, 1958. 17s. 6d.  
 STIVENS, D. G. The scholarly mouse and other tales. Syd., Angus and Robertson, 1957. 15s.  
 WILLIAMSON, H. D. The sunlit plain. Syd., Angus and Robertson, 1958. 17s. 6d. Sydney Morning Herald prize-winning novel.

\* Excludes the works of individual authors, reference to which will be found in Miller, *Australian literature* and Serle, *An Australasian anthology*.

## Poetry.

## RECENT PUBLICATIONS OF INTEREST.

- ANDERSON, ETHEL L. The song of Hagar to the patriarch Abraham. Syd., Edwards & Shaw, 1957. 15s.  
 BRENNAN, C. J. The burden of Tyre: fifteen poems. Syd., Harry F. Chaplin, 1953. 63s.  
 CAMPBELL, D. The miracle of Mullion Hill. Syd., Angus & Robertson, 1956. 15s.  
 CATO, Nancy F. The dancing bough. Syd., Angus and Robertson, 1957. 15s.  
 COLLINSON, L. The moods of love. Melb., Overland, 1957. 18s. 9d.  
 DOBSON, ROSEMARY DE B. Child with a cockatoo and other poems. Syd., Angus & Robertson, 1955. 15s.  
 DUTTON, G. P. H. Antipodes in shoes. Syd., Edwards & Shaw, 1958. 17s. 6d. Sponsored by the Commonwealth Literary Fund.  
 FAIRBRIDGE W. S. Poems. Syd., Angus & Robertson, 1953. 15s.  
 FINNIN, MARY. The shield of place. Syd., Angus and Robertson, 1957. 15s.  
 FITZGERALD, R. D. This night's orbit. Melb., Melbourne Univ. Press, 1953. 21s.  
 FRAZER, G. Poems of life and time. Syd., Elizabethan Press, 1957. 21s.  
 GILMORE, DAME MARY. Fourteen men: verses. Syd., Angus & Robertson, 1954. 15s.  
 HOPE, A. D. The wandering islands. Syd., Edwards & Shaw, 1955. 15s.  
 KENDALL, H. C. Selected poems of Henry Kendall: with biographical and critical introd. by T. Inglis Moore. Syd., Angus & Robertson, 1957. 17s. 6d.  
 LAWSON, H. H. Songs from Lawson: (ed. by John Meredith: illus. by Clem Millward). Syd., Alan Scott, 1956. 4s.  
 MCCRAE, H. R. Forests of Pan. Brisb., Meanjin, 1944. 4s. 6d.  
 McDONALD, NANCY M. The lonely fire. Syd., Angus & Robertson, 1954. 15s.  
 MANN, L. Elegiac and other poems. Melb., Cheshire, 1957. 17s. 6d.  
 MARTIN, D. Poems of David Martin, 1938-1958. Syd., Edwards & Shaw, 1958. 18s. 9d.  
 MOORE, T. I. Bayonet and grass: poems. Syd., Angus and Robertson, 1957. 16s.  
 PATERSON, A. B. Collected verse. Syd., Angus & Robertson, 1956. 16s.  
 POETRY SOCIETY OF AUSTRALIA. First anthology 1956. Syd., Printed by Edwards and Shaw, 1957.  
 SLESSOR, K. Poems: (2nd ed.) Syd., Angus & Robertson, 1957. 16s.  
 STEWART, H. F. Orpheus and other poems. Syd., Angus & Robertson, 1956. 15s.  
 THOMPSON, J. Thirty poems. Syd., Edwards & Shaw, 1954. 10s. 6d.  
 WEBSTER, C. W. Poems. Burradoo, N.S.W., Juniper Press, 1958.  
 WRIGHT, JUDITH A. The two fires. Syd., Angus & Robertson, 1955. 15s.

## Drama and Essays.

## RECENT PUBLICATIONS OF INTEREST.

- ARMSTRONG, M. S. Plays in one act: Thomas: Penny Dreadful; Drought. Syd., Edwards & Shaw, 1958. 12s. 6d.  
 BRABAZON, F. Singing threshold. Syd., Beacon Hill Press, 1958. 21s. Seven plays, mainly in verse.  
 HORLOCK, Muriel F., comp. It seems to us: a book of thoughtful opinions: chosen by Muriel F. Horlock: decorations by Margaret R. Dods. Melb., Longmans Green, 1958. 21s.  
 LAWLER, R. Summer of the seventeenth doll. Lond., Angus & Robertson, 1957. 15s.  
 PERSSE, M. Their succeeding race: a pageant play performed by Geelong Church of England Grammar School in the centenary year, 1957. Melb., Cheshire, 1958.  
 PHILLIPS, A. A. The Australian tradition: studies in a colonial culture. Melb., Cheshire, 1958. 19s. 6d.  
 SLIM, Sir WILLIAM J. Courage and other broadcasts. Lond., Cassell, 1957. 13s. 6d.  
 STEWART, D. A. Four plays. Syd., Angus and Robertson, 1958. Includes his *The fire on the snow*; *The golden lover*; *Ned Kelly*; *Shipwreck*.

## Children's Books.

## RECENT PUBLICATIONS OF INTEREST.

- AUSTRALIAN JUNIOR ENCYCLOPEDIA: ed. Charles Barrett (2nd ed.). Syd., Australian Educational Foundation, 1956. 210s.  
 BARNARD, MARGARET. Wish and the magic nut . . . illus. by Sheila Hawkins. Syd., Sands, 1956. 5s. 6d.  
 CHADWICK, DORIS. John of Sydney Cove: illus. by Adye Adams. Lond., Nelson, 1957. 8s. 6d.  
 CHAUNCY, NAN. Tiger in the bush: illus. by Margaret Horder. Lond., Oxford Univ. Press, 1957. 9s. 6d.  
 CLARK, MAVIS T. Gully of gold: illus. by Anne Graham. Melb., Heinemann, 1958. 14s. 6d.  
 DALZIEL, K. Penguin road: illus. by Frank Norton. Syd., Angus & Robertson, 1955. 15s. Story of the Australian National Antarctic Research Expedition at Heard Island.  
 GARDINER, LYNDSAY B. Pacific peoples: illus. by Nancy Parker. Melb., Longmans, Green, 1957.  
 GILMORE, DAME MARY. Verse for children: drawings by Celeste Mass: hand-set ed. Syd., Writers Press 1955. 4s. 6d.  
 GUNN, JEANNIE. The little black princess of the Never-never. Melb., Robertson & Mullens, 1955. 12s. 9d.  
 HEDDLE, ENID M. Boy on a horse: by E. M. Heddle and H. J. Samuel. Melb., Cheshire, 1957. 15s. 6d. The story of the poet Adam Lindsay Gordon.  
 ———. The boomerang book of legendary tales: chosen, ed. and arranged by Enid Moodie Heddle: decorations by Nancy Parker. Melb., Longmans Green, 1957. 18s. 9d.  
 MACINTYRE, ELISABETH. Katherine. Syd., Angus and Robertson, 1958. 13s. 6d.  
 MITCHELL, ELYNE. The silver brumby. Lond., Hutchinson, 1958. 12s. 6d.  
 MORAN, H. T., ed. The play begins: ten short plays. Melb., Cheshire, 1958. 8s.  
 PAICE, MARGARET. The lucky fall. Syd., Angus and Robertson, 1958. 15s.

Children's Books—*continued.*RECENT PUBLICATIONS OF INTEREST—*continued.*

- PALMER, HELEN G. *Makers of the first hundred years*: by Helen G. Palmer and Jessie MacLeod, Melb., Longmans, Green, 1956. 15s. 6d.
- PATCHETT, MARY O. E. *The brumby*: illus. by Juliet McLeod. Lond., Lutterworth, 1958. 10s. 6d.
- PENDER, LYDIA. *Marbles in my pocket* (verse) illus. by Pixie O'Harris. Syd., Writers' Press, 1957.
- PHIPSON, JOAN. *It happened one summer*: illus. by Margaret Horder. Syd., Angus and Robertson, 1957. 15s.
- POIGNANT, A. *Piccaninny walkabout: a story of two aboriginal children*. Syd., Angus & Robertson, 1957. 16s.
- REES, G. L. C. *The story of Koonawarra the black swan*: illus. by Margaret Senior. Syd., Sands, 1957. 7s. 6d.
- *Quokka Island*. Lond., Collins, 1957. 6s.
- SCOTT, MARY. *One of the family*. Syd., Angus and Robertson, 1958. 16s.
- SPENCE, ELEANOR. *Patterson's track*. Melb., Oxford Univ. Press, 1958. 17s. 6d.
- UNWIN, M. J. H. *Booran: a tale of early Australia*. Brisb., Jacaranda Press, 1958. 18s. 9d.
- WRIGHT, JUDITH A. *King of the dingoes*. Melb., Oxford Univ. Press, 1958. 17s. 6d.

## DIARY OF PRINCIPAL ECONOMIC EVENTS, 1955 to 1958.

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The principal economic events for the years 1931 to 1938 were shown on pages 968 to 977 of Official Year Book No. 33, those for the years 1939 to 1944 on pages 1129 to 1141 of Official Year Book No. 36, those for the years 1945 to 1948 on pages 1235 to 1245 of Official Year Book No. 37, while those for the years 1949 to 1954 were covered by Official Year Books Nos. 38 to 41. For reasons of space some of the items originally shown for the years 1955 and 1956 have been omitted from this issue. Previous issues should be consulted for additional information for these years.

### 1955.

When the Treasurer presented the budget in August he said that there were "unmistakable signs of active inflation". A boom had been getting under way in consumer spending and private investment, and labour shortages had become general. No concessions in taxation were made in the budget. During the year, several measures were introduced to check inflation. In July, the Commonwealth Bank directed the trading banks to restrict new loans which would increase the scale of hire purchase. Towards the end of the year, the Prime Minister held a series of conferences with representatives of financial and industrial institutions to enlist their co-operation in checking inflation. Hire purchase and finance companies agreed to restrict the increase in their loans to 10 per cent. above the level at September, 1955. The value of exports was slightly higher than in 1954 but the value of imports was much greater than in 1954 and the balance of payments deficit was therefore greater in 1955. Import restrictions were made more severe in April and again in September. Margins for skill were adjusted upwards in many occupations. Nominal wages rose throughout the year, and by December, 1955, were  $3\frac{1}{2}$  per cent. higher than in December, 1954. Over the same period, average earnings rose by 7 per cent. and retail prices by  $4\frac{1}{2}$  per cent. Employment rose steadily during the year, and the number of persons receiving unemployment benefit fell to the lowest level since 1951. Investment by private businesses in 1955 was well above the level of 1954. There were 78,000 new houses completed in 1955, a higher number than in any post-war year except 1952. Secondary production was generally maintained at the high level of the previous year, and output of primary products increased. The wheat acreage in 1955-56 was slightly less than in any other post-war year, but the average yield was the highest on record. The total crop was therefore nearly as high as in 1953-54. The production of wool in 1955-56 was a record at 1,410 million pounds. Net immigration during 1955 was 95,000 compared with 68,000 in 1954 and 43,000 in 1953.

*1st January.*—Price control in Victoria ended after 14 years. Increased Bank Deposit interest rates.

*12th January.*—Harbour at Cockburn Sound, Western Australia, opened to provide shipping facilities for Kwinana.

*1st February.*—Kwinana £40 million oil refinery began operations.

*4th February.*—Arrangements completed for issue of £6 million public loan in Switzerland to Commonwealth Government.

*7th February.*—Australia's first aluminium plant, at Bell Bay, Tasmania, began production.

*22nd February.*—Guthega power station in operation, first power generated from Snowy Mountains Hydro-electric scheme being fed into New South Wales electricity system.

*24th February.*—Disastrous floods cover large areas of central west New South Wales and Hunter Valley.

*18th March.*—Government plan announced for sale to tenants of houses built under Commonwealth and State Housing Agreement.

*19th March.*—Details announced of new 15 year,  $54\frac{1}{2}$  million dollar loan from International Bank of Reconstruction to Australia.

*21st March.*—New import restrictions imposed, cutting Australia's rate of imports by about 20 per cent.

*23rd March.*—First commercial shipment of Australian uranium oxide, worth about £200,000, dispatched to United States.

*15th April.*—All price control ended in New South Wales.

*12th May.*—Increase of interest rates for home purchase and building finance from 5 per cent. to 5½ per cent. announced by most of major life assurance companies in Australia.

*5th June.*—Australia's 1955–56 immigration programme to be increased to basic intake of 125,000 migrants (including 70,000 under assisted-passages scheme).

*10th June.*—Full High Court in reserved judgment declared invalid recent New South Wales legislation imposing a road tax on interstate road hauliers.

*19th June.*—Commonwealth abandons control of tea.

*21st–23rd June.*—At annual Loan Council meeting, the Council, by majority vote, approved borrowing programme of £193,500,000 for public works in 1955–56. Prime Minister announced that Commonwealth Government would grant States £157 million taxation reimbursements for 1955–56.

*19th July.*—Decision by Federal Cabinet to cut subsidy on local consumption of butter and cheese, followed by increase in butter and cheese prices.

*26th–28th July.*—Price control re-imposed in New South Wales and South Australia.

*22nd August.*—First International Wool Textile Research Conference to be held in Australia opened in Sydney.

*23rd August.*—Contract system of shipping Australian wool exports to Europe and United Kingdom broke down as British and European shipowners refused to renew contracts at less than 10 per cent. increase in freight rates.

*24th August.*—Commonwealth Budget for 1955–56 introduced into the House of Representatives. (For details see Official Year Book, No. 43, page 1105.)

*26th August.*—Overall prices of Australian iron and steel raised by 5 per cent.

*30th August.*—New £30 million hot-strip steel mill of Australian Iron and Steel Ltd. at Port Kembla (N.S.W.) opened by the Prime Minister.

*12th–21st September.*—Prime Minister called series of conferences with representatives of trading banks, hire purchase companies, and trade-union leaders to discuss financial aspects of Australian economic problems and suggested remedies. Fresh tightening of bank credit.

*1st October.*—Increase of 7½ per cent. in shipping freights for Australian exports to most overseas countries became effective.

*6th October.*—15 million dollars (£A6.8 million) loan successfully negotiated in Canada by Australian Government.

*4th November.*—Automatic quarterly basic wage adjustments reintroduced in New South Wales.

*18th November.*—Queensland and New South Wales coal producers combined to form Australian Coal Association with main object of trying to find new and improved ways of producing, preparing and marketing coal.

*22nd November.*—For the first time in history, brown coal coke was successfully used at a Richmond (Vic.) foundry to smelt iron commercially.

*26th November.*—Reduction of about 10 per cent. in Queensland shearing rates under the State Shearing industry award ordered in Industrial Court judgment of 25th November.

*17th December.*—Commonwealth £30 million cash loan undersubscribed by £2 million.

## 1956.

In order to arrest inflationary tendencies and the decline in international reserves, additional measures were found necessary early in 1956. Despite import restrictions, overseas balances had fallen by £55 million in the six months ended December, 1955. New taxation measures passed to provide a brake on consumption and investment spending. Taxation increased on motor vehicles and petrol, higher customs and excise duties on beer, spirits, tobacco, cigars and cigarettes, increased company taxation and increased sales

tax on less essential goods. Banks agreed to raise interest rates on fixed deposits by 1 per cent. and overdraft rate from 5 per cent. to an average of  $5\frac{1}{2}$  per cent. In June, new import cuts estimated at £40 million a year were imposed on motor vehicles and chassis. Oversea reserves had fallen by a further £18 million in the six months ended June, 1956. Imports fell from £863 million in 1955 to £765 million in 1956 and exports rose from £778 million to £840 million. Exports of wool were £23 million higher at £377 million and exports of wheat and flour £19 million higher at £84 million. Oversea reserves at December, 1956, stood at £425 million, £70 million higher than in June, 1956.

Production of wool in 1955-56 was 1,410 million pounds. Wheat production in 1955-56 was 195 million bushels. Preliminary estimates of the total value of production of primary industries suggested an increase of 8 or 9 per cent. in 1956-57.

Secondary production generally was at the same high level as in 1955.

Although total civil employment (excluding rural and household domestic employees) was somewhat higher in the year, the number of persons receiving unemployment benefits was over 13,000 at the end of 1956, compared with 3,245 at the end of 1955. Nominal wages were nearly 5 per cent. higher, the main increase occurring in June, when an increase of 10s. per week in the Commonwealth basic wage was granted by the Full Arbitration Court.

Although there was little change in gross private investment on fixed capital equipment during 1956, significant changes occurred in some of the components of investment. Private dwelling construction was about £10 million lower, the value of motor cars purchased was about £15 million lower, investment in commercial vehicles and other capital equipment was at much the same level and other new building and construction was about £20 million higher than in 1955.

*5th January.*—Rent control lifted in Tasmania.

*18th January.*—Federal Executive Council empowered all trading banks to operate Savings Banks on conditions broadly the same as those governing State Savings Banks. (Bank of New South Wales Savings Bank Limited and Australia and New Zealand Savings Bank Limited opened 19th January, C.B.C. Savings Bank Limited opened 16th July, 1956.)

*23rd January.*—General Australian waterside strike over pay rates and working conditions for waterside workers. Queensland floods destroyed tobacco crops in South-West, floodwaters created widespread havoc, heavy losses of sheep.

*1st February.*—Loan Council meeting in Canberra decided not to alter the £190 million programme for State public works in this financial year. It agreed also to increase the interest rate on public loans by semi-governmental authorities from  $4\frac{3}{4}$  to  $4\frac{1}{2}$  per cent. but decided against making any change in the Commonwealth bond rate.

*15th February.*—Waterside workers resumed work in all Australian ports after 23 days strike (*see* 23rd January).

*17th February.*—Conciliation Commissioner reduced award wages for shearers in all States except Queensland by 5 per cent. from 5th March (*see also* 26th November, 1955).

*20th February.*—Commonwealth Government set up Advisory Panel of experts to advise Economic Committee of Commonwealth Ministry on economic problems.

*24th February.*—Federal Council of Australian Workers' Union called on shearers and other pastoral workers not to work under new rates fixed by Conciliation Commissioner (*see* 17th February).

*1st March.*—British Atomic Energy Commission contracted to buy more than £40 million worth of uranium oxide from Mary Kathleen leases near Mt. Isa.

*5th March.*—Improvements to working of the arbitration system discussed at round-table conference by Ministry of Labour Advisory Council which included leading trade-unionists, employer's organizations and Government experts.

*14th March.*—The Prime Minister, in a statement to the House of Representatives, announced a number of new economic measures proposed by the Government to achieve economic stability. These included increases in sales tax on motor vehicles, jewellery and other goods of a less essential character, increases in customs and excise duties on petrol, beer, spirits, tobacco, cigarettes and cigars and increased income tax on companies. In addition, bank overdraft rates would be permitted to rise from 5 per cent. to an average of  $5\frac{1}{2}$  per cent. with a maximum of 6 per cent. and bank fixed deposit rates would be increased by 1 per cent.

*21st March.*—Australian Loan Council approved Commonwealth proposal that interest rate on new semi-governmental loans be raised. Three new loans issued at rates of  $5\frac{1}{4}$  per cent. and  $5\frac{3}{8}$  per cent.

*27th March.*—Announced that banks would be free to fix their own rates for individual loans within the limits announced by the Prime Minister on 14th March (*see above*).

*30th March.*—Agreement completed between Australia and Netherlands under which 75,000 Dutch settlers would come to Australia in next five years.

*4th April.*—Rural and Industries Bank of Western Australia opened savings bank department.

*7th April.*—Commonwealth Bank increased rates of interest payable on savings bank accounts by one-quarter per cent. Other savings banks followed suit.

*19th April.*—Bill introduced in Commonwealth Parliament to set up Export Payments Insurance Corporation. (Act assented to 19th June.)

*27th April.*—New agreement finalized by United Nations Wheat Conference; to come into force on 1st August, for a period of three years.

*25th May.*—Full Arbitration Court announced 10s. increase in Commonwealth basic wage and restated decision not to make automatic quarterly adjustments.

*29th May.*—Bill introduced in Commonwealth Parliament to replace Stevedoring Industry Board by Australian Stevedoring Industry Authority. (Act assented to 30th June.)

Announced that, as part of Commonwealth Government's world-wide trade promotion drive, Australian trade missions would visit New Zealand, India, Ceylon, Japan, Pakistan, the Middle East and, possibly, the Philippines to try to boost Australian exports.

*19th June.*—Announcement made of successful conclusion of negotiations for an Australian loan of \$25 million to be raised in New York.

*21st June.*—Executive of Australian Council of Trades Unions, at special congress in Melbourne, empowered to take nation-wide strike action against Stevedoring Industry Act (*see 29th May*).

*24th June.*—Biggest floods for 70 years on Darling and Murrumbidgee Rivers cover vast areas of country in south-west New South Wales and also affect northern Victoria.

*26th–28th June.*—At the meeting of the Loan Council, the Commonwealth rejected proposals by the States for a substantially increased loan programme to finance State works during 1956–57. With the Commonwealth dissenting, the Loan Council approved a governmental borrowing programme of £210,000,000 for 1956–57. (*See p. 1134 of Official Year Book No. 44 for details.*)

*28th June.*—At the Premiers Conference, the Acting Prime Minister and Treasurer, Sir Arthur Fadden, announced that the Commonwealth Government would make a supplementary grant to the States of £19,400,000. This would bring the total of the tax reimbursement grant and the supplementary grant to £173,000,000 or £16,000,000 more than similar grants in 1955–56.

Acting Prime Minister announced new £40 million a year import cuts to reduce imports of fully assembled motor vehicles by 50 per cent. and unassembled chassis by 30 per cent. Dollar licences for import of motor vehicles from North America reduced by 30 per cent.

*10th July.*—By decision of Privy Council, New South Wales Government held liable for repayment of £1 million to interstate road hauliers in respect of licence fees and mileage charges paid since July, 1952.

*13th July.*—Tasmanian wages board decided to suspend quarterly adjustments of State basic wage after 16s. adjustment made for June quarter.

*1st August.*—New International Wheat Agreement commenced to operate. Australian quota 30 million bushels out of total of 303 million bushels (*see Chapter XXII., p. 879*).

*14th August.*—New Conciliation and Arbitration Act became effective. (*See Chapter XII., page 412.*)

*16th August.*—Special Premiers' Conference. Commonwealth asked States to freeze basic wage but failed to reach agreement.

*22nd August.*—Large deposit of bauxite discovered on west coast of Cape York Peninsula.

*29th August.*—The 1956–57 Budget was introduced into the New South Wales Legislative Assembly. (*See p. 1134 of Official Year Book No. 44 for details.*)

*30th August.*—Commonwealth Budget for 1956–57 introduced into the House of Representatives. (*For details, see p. 1134 of Official Year Book No. 44.*)

*11th September.*—The 1956–57 Budget was introduced into the Victorian Legislative Assembly. (*For details, see Official Year Book No. 44, p. 1135.*)

18th September.—The 1956–57 Budget was introduced into the South Australian Legislative Assembly. (For details, see Official Year Book No. 44, p. 1135.)

20th September.—The 1956–57 Budget was introduced into the Queensland Parliament. (For details, see Official Year Book No. 44, p. 1135.)

28th September.—All price controls suspended in New South Wales.

4th October.—Minister for Trade stated that United Kingdom asked Government for its reactions to suggestion that United Kingdom should join in partial free trade area in Western Europe.

10th October. Victorian Legislative Assembly passed legislation to abolish cost of living adjustments for State employees.

11th October. Prime Minister announced signing of new five-year Sugar Agreement between Commonwealth and Queensland governments.

12th October.—Queensland State Industrial Court granted an interim shearing award for payment of £7 11s. per 100 sheep shorn. This was accepted by shearers and 10 months old industrial dispute ended.

26th October.—Eight metal trades unions, backed by A.C.T.U., applied to newly formed Commonwealth Industrial Commission for basic wage increases and restoration of quarterly cost-of-living adjustments.

31st October.—The Tasmanian Budget for 1956–57 was tabled in the House of Assembly. (For details, see Official Year Book No. 44, p. 1135.)

8th November.—The Western Australian Budget for 1956–57 was introduced. (For details, see Official Year Book No. 44, p. 1136.)

12th November.—Australia and United Kingdom agreed on comprehensive trade pact to replace 24-year-old Ottawa Agreement.

22nd November.—Commonwealth Treasurer announced that Minister for External Affairs had signed loan agreements on behalf of Commonwealth for a total of \$27 million (£A12.1 million).

29th November.—First gas from brown-coal gasification plant at Morwell (Victoria) reached Melbourne through 103 mile high-pressure pipeline.

4th December.—World Bank announced \$50 million loan to Australia for development of agriculture, transport, industry and mining.

### 1957.

Throughout 1957, exports of merchandise continued at a high level, and for 1956–57 reached a total of £973 million. During the second half of 1957, there was a tendency for the level to fall off in comparison with 1956. Imports during the early months of the year continued at the low level established following the restrictions imposed in 1956; but, in the later months of the year, rose considerably following an easing of restrictions in the second quarter. Australia's international reserves rose by £142 million to £567 million during the first six months of the year and by a further £23 million to £590 million during the remainder of the year. Internal trade was at a higher level than in 1956.

Drought conditions in the Eastern States during 1957 considerably reduced the production of many primary products, the total gross value of primary production in 1957–58 being about 10 per cent. below the 1956–57 level.

During the year, secondary industries continued to expand. Employment in factories rose during the year and there were increases in output of most commodities for which information is available.

Employment in the building and construction, mining and quarrying and transport industries fell during the year by 13,000, 3,700 and 2,600 respectively. These falls, however, were offset to some extent by increases in employment in factories and in the commercial and professional fields. Overall there was a small increase of 9,000 in the number of civil employees (excluding rural and household domestic employees).

Average nominal wage rates for adult males rose approximately 2 per cent. The main increase occurred in the second quarter following an increase of 10s. a week in the Commonwealth basic wage. Average earnings for employees (male units) rose by about 3 per cent. over the year.

1st February.—Shipping freights to the United Kingdom and European countries rose by 14 per cent.

*7th February.*—Consolidated Zinc Corporation Ltd. announced £8 million construction programme for a zinc smelter and the production of sulphuric acid and superphosphate at Cockle Creek (New South Wales).

*1st March.*—Commonwealth Savings Bank increased its maximum housing loan from £1,750 to £2,500.

*2nd April.*—Details of easing of import restrictions released. The ceiling for imports in 1957–58 was raised to £775 million but the modified restrictions will operate from 1st April, the start of the quota year.

*29th April.*—Commonwealth Conciliation and Arbitration Commission announced 10s. increase in Commonwealth Basic Wage to operate from 15th May.

New South Wales government declared eight districts of the State drought areas.

*23rd May.*—Duties reduced on over 800 items imported from foreign countries.

*24th May.*—Australian Loan Council approved a government borrowing programme of £200 million for financial year 1957–58. This included £166,840,000 for State Works and £33,160,000 for housing under the agreement between the Commonwealth and States. In addition, borrowing programmes of £89,000,000 were approved for semi-governmental and local authorities.

*30th May.*—Commonwealth Government passed legislation imposing a levy on wheat-growers to finance more wheat research.

*4th June.*—Consolidated Zinc Corporation announced a major undertaking in the development of Weipa Bauxite on Cape York peninsula.

*22nd June.*—Acting Prime Minister officially closed Adaminaby Dam outlet gates and water started filling the Adaminaby Reservoir.

*26th June.*—Commonwealth Government decided to grant United States additional air traffic rights from Australia to Antarctica, South Africa, and South-east Asia for reciprocal rights across the United States for Australian Airlines flying to Europe.

*2nd July.*—High Court ruled that interstate vehicles could not be compelled to register in New South Wales.

*6th July.*—Agreement on Commerce between Japan and Australia signed in Tokyo by Japanese Prime Minister and Minister for Foreign Affairs and Australian Minister for Trade, on “most favoured nation” basis.

*5th August.*—First plant in Australia to produce tinplate, built for flat products division of B.H.P. Co. Ltd. at Port Kembla, was officially opened.

*15th August.*—British migrants enabled to claim pensions as soon as they arrive in Australia. Previously they had waiting period of 5 years for invalid pensions and 20 years for age pensions.

*23rd August.*—Full High Court upheld validity of Uniform Taxation Legislation but declared invalid the section giving priority to the Commonwealth.

*24th August.*—Ansett Transport Industries Ltd. purchased A.N.A. as a going concern for £3.3 million.

*25th August.*—Of growers who exercised their rights to vote, four out of five voted in favour of the Commonwealth Government’s stabilization offer for currants and sultanas.

*31st August.*—The full High Court upheld the validity of a Victorian tax on commercial vehicles, including those engaged in interstate trade, imposed solely for the maintenance of roads.

*3rd September.*—Commonwealth Budget for 1957–58 introduced into House of Representatives. In 1956–57, receipts of the Consolidated Revenue Fund (excluding self balancing items and balances transferred from Trust Accounts) were £1,234,400,000 or £105,700,000 more than in 1955–56. The main items of revenue were (1955–56 receipts shown in parentheses) Income Taxes £620,300,000 (£574,000,000); Excise Duties £217,400,000 (£168,300,000); Customs Duties £68,600,000 (£87,500,000) and Sales Tax £125,800,000 (£110,000,000), Expenditure from the Consolidated Revenue Fund (excluding self balancing items and the amount transferred to the Loan Consolidation and Investment Reserve) amounted to £1,122,600,000.

The Budget provided for an estimated expenditure from the Consolidated Revenue Fund of £1,321,700,000 (excluding self balancing items).

The budget proposals provided for increases in the rates of social service pensions and allowances, war and service pensions and hospital benefits, additional expenditure on homes for the aged, an increase in the subsidy to gold producers and increases in payments to the States and expenditure on Capital works and services.

*4th September.*—1957–58 Budget introduced into the South Australian House of Assembly. In 1956–57, receipts of the Consolidated Revenue Fund were £65,761,000 (£6,359,000 more than in 1955–56). Expenditure was £65,810,000 (£4,977,000 more than in 1955–56). There was thus a deficit of £49,000 for the year. The Budget for 1957–58 provided for expenditure of £71,615,000 (an increase of £5,805,000). Estimated revenue was £71,095,000 (£5,334,000 more than the previous year). This would leave a deficit of £520,000.

*5th September.*—1957–58 Budget presented to the Tasmanian House of Assembly. In 1956–57, total revenue was £18,959,000 (£948,000 more than in 1955–56). Expenditure amounted to £19,772,000 (£1,876,000 more than in 1955–56) and there was a deficit of £813,000. The Budget for 1957–58 provided for a total expenditure of £21,887,000 (an increase of £2,115,000). Estimated revenue was £20,797,000 (an increase of £1,838,000). This would result in a deficit of £1,090,000.

*11th September.*—1957–58 Budget introduced into the New South Wales Legislative Assembly. During 1956–57, the transactions of the Consolidated Revenue Fund, Railways, Metropolitan and Newcastle transport and Sydney Harbour services resulted in an overall surplus of £129,000. After providing for debt charges, there were deficits of £5,800,000 on the Railways and £1,200,000 on the Metropolitan and Newcastle transport services. The 1957–58 Budget provided for a total expenditure of £232,300,000 (an increase of £8,600,000 over 1956–57)—Estimated revenue was £232,400,000 (£8,600,000 more than 1956–57).

1957–58 Budget introduced into the Victorian Legislative Assembly. In 1956–57, Revenue was £133,300,000 expenditure £137,600,000 and the overall deficit £4,300,000. The deficit included a deficit on Railways of £5,200,000 and State Coal Mines of £300,000. The Budget for 1957–58 provides for an expenditure of £145 million (£7,400,000 more than in 1956–57). Revenue for the year was expected to be £141,500,000. This will result in a deficit of £3,500,000. It was expected that the deficit on Railways would be £5 million and on State Coal Mines, £300,000.

*12th September.*—1957–58 Budget presented to the West Australian Legislative Assembly. In 1956–57, total revenue was £54,300,000 (£4,700,000 more than in 1955–56). Expenditure amounted to £56,200,000 (£4,800,000 more than in 1955–56), and there was a deficit of £1,900,000. The 1957–58 Budget provided for an expenditure of £58,600,000 (an increase of £2,300,000). Receipts were estimated at £55,900,000 (£1,600,000 more than in 1956–57). There would thus be a deficit of £2,700,000.

*14th September.*—New South Wales Government gazetted maximum interest rates and minimum deposits applicable under hire purchase and credit sales agreements prescribed in the Hire Purchase (Amendment) Act.

*26th September.*—1957–58 Budget introduced into the Queensland Legislative Assembly. In 1956–57, receipts of the Consolidated Revenue Fund amounted to £85,158,000 which was £9,489,000 more than in 1955–56. Total expenditure was £85,143,000 or £7,751,000 more than in 1955–56. There was thus a surplus of £15,000. The 1957–58 Budget provided for an expenditure of £89,958,000 (£4,815,000 more than in 1956–57). This includes a provision of £655,000 to meet accumulated losses on several State business undertakings. Receipts were estimated at £88,455,000 (or £3,297,000 more than in 1956–57). There would thus be a deficit of £1,503,000.

*30th September.*—Conference of British Commonwealth Finance ministers opened at Mount Tremblant, Canada.

*1st October.*—Australia entered into double-tax agreement with Canada similar to those existing between Australia and the United Kingdom, and Australia and the United States of America.

*17th October.*—Applications invited for the grant of licences for commercial television stations in the Brisbane, Adelaide, Perth and Hobart areas.

*24th October.*—Treasurer introduced new banking legislation in House of Representatives. Bills later defeated in Senate (November, 27th).

*4th November.*—First shipment of drought-relief wheat left Western Australia for New South Wales and Queensland.

*19th November.*—Full High Court ruled that all employees on Federal awards were entitled to long service leave.

*20th November.*—Wheat Industry Research Council and Wheat Industry Research Committees appointed.

*10th December.*—Commonwealth Bank advises trading banks to increase advances.

*12th December.*—Bill introduced in Victoria to allow cheque facilities to depositors with State Savings Bank of Victoria.

*13th December.*—Minister for Trade announced that Commonwealth Government had decided to import 1½ million bushels of wheat from Canada into New South Wales.

*17th December.*—Commonwealth ammunition filling and assembly factory opened at St. Marys, near Sydney.

### 1958.

Towards the end of 1957, the Australian economy started to feel the effect of the decline in economic activity overseas. Conditions overseas throughout 1958 were such that the prices received for exports, particularly wool and metals, were considerably below those received in 1956 and 1957. Export income was further reduced by the small quantities of wheat and other grains available for export as a result of the drought conditions in the Eastern States during 1957.

By the beginning of 1958, unemployment was at a higher level than at any time since 1953 although this was mainly restricted to areas affected by the drought and to several mining areas.

To help offset the effect of the fall in export income, the Commonwealth Bank, in April, ceased the restrictions on bank lending and advised banks that there was a need to increase advances, especially in the rural and building industries. At the same time, the bank released £20 million of the special deposits of the trading banks. Further releases later in the year resulted in a reduction in the amount of these deposits from £340,300,000 in December, 1957, to £265,100,000 in December, 1958. In addition, the Commonwealth Government took action to increase public expenditure. In February, the States were offered an additional £5 million revenue grant and the 1957–58 borrowing programmes for local authorities were increased by £3 million. At the Loan Council meeting in June, the borrowing programme for State works and housing in 1958–59 was fixed at £210 million an increase of £10 million over that for 1957–58 and at the same time the Commonwealth undertook to increase the general revenue grants to the States by £15 million. To permit these increases in public expenditure without increasing taxation, the Commonwealth budget for 1958–59 provided for an overall cash deficit estimated at £110 million.

During the first six months of the year, the level of exports was considerably below that of the previous year. Exports of merchandise during the period were only £360 million compared with £530 million in the same period of 1957. There was, during the second half of the year, a slight improvement, and exports of merchandise for the period were £378 million compared with £453 million for the same period of 1957. Imports of merchandise continued throughout the year at the level reached in the later months of 1957 and, as a result, imports of merchandise in 1958 were £793 million, £41 million greater than in 1957. During the year international reserves fell by £90 million to £500 million.

A high level of internal trade continued throughout 1958 and increases in sales of most types of commodities were recorded. Sales under hire purchase agreements were higher than in 1957 and, as a result, balances outstanding increased by £72,800,000 compared with an increase of £34,900,000 in 1957.

The small wheat harvest in 1957–58 (97,600,000 bushels) following the 1957 drought and low prices for wool and other primary products considerably reduced the value of primary production. Towards the end of the year, however, prospects improved and it was estimated that the wheat crop for 1958–59 would exceed 200 million bushels. Wool production (1,433,400,000 lb.) in 1957–58 was 131 million lb. lower than in the previous year.

During the year, large increases in production were recorded in the radio and television industries and motor vehicle industries and substantial increases in many other industries. On the other hand, there was a reduction in the output of many important items of clothing and textiles and of some foodstuffs.

The number of persons in civilian employment (excluding rural and household domestic employees) increased by 29,100 during the year. In the mining and quarrying industries,

there was a fall of 3,000 but in most other industries there were substantial increases. Increases recorded in the more important industries were professional and personal services, 9,600; retail trade, 4,800; other commerce and finance, 5,000; factories, 3,900; building and construction, 2,300 and transport and communication, 2,300. There was a slight increase in the numbers of persons registered for unemployment benefit, the number registered at the end of 1958 being 27,600, compared with 26,000 at the end of 1957.

The average nominal wage rates for adult males rose by approximately 1.7 per cent. during the year. The main increase occurred in the second quarter following an increase of 5s. a week in the Commonwealth basic wage. Average weekly earnings by employees (male units) were about 3 per cent. higher in 1958 than in 1957. The interim index of retail prices was 3 per cent. higher in the December quarter of 1958 than a year earlier.

*2nd January.*—New Zealand imposed import restrictions resulting in temporary set back to expansion of Australia's exports to New Zealand.

*14th January.*—Qantas commenced first regular round the world air service via San Francisco and New York.

*21st January.*—New reciprocal Social Services agreement made with United Kingdom (see p. 682).

*6th February.*—Wheat Industry Research Council inaugurated to study soil fertility and problems of production and marketing of wheat.

*9th February.*—Commonwealth Government sold two coal mines to State Electricity Commission of New South Wales for £1,800,000.

*13th February.*—Commonwealth Government made special grant of £5 million to States to assist their general financial position and to counter unemployment.

*30th March.*—Ceiling for import licences to remain fixed at £800 million per annum with some basic raw materials (e.g. petroleum) to be exempted from licensing.

*15th April.*—Trade mission left for Singapore, Malaya and Thailand.

*18th April.*—Australia's first nuclear reactor opened at Lucas Heights, near Sydney, by Prime Minister.

*22nd April.*—Loan of \$25 million at 4½ per cent. was raised in New York.

*1st May.*—Wide changes made in Immigration Act, including abolition of Dictation Test and easing of visa requirements for alien visitors. Tenders accepted for new works on upper Tumut section of Snowy Mountains Hydro-electric Scheme.

*11th May.*—Adaminaby Dam completed 2 years ahead of schedule.

*12th May.*—Conciliation and Arbitration Commission announced a Commonwealth Basic Wage increase of 5s.

*14th May.*—Commonwealth Government undertook to assist the copper industry to maintain Australian price at £330 a ton, partly by duty, partly by bounty.

*5th June.*—The Australian Loan Council approved of a borrowing programme for the financial year 1958–59 of £210,000,000, including £35,810,000 for housing under the Commonwealth-State Housing Agreement and £174,190,000 for State Works. Borrowing programmes for semi-Governmental bodies and Local Authorities amounting to £95,000,000 were also approved.

*1st July.*—Commonwealth Bank at request of Commonwealth Government made available £10 million credit to New Zealand at 4½ per cent.

*4th July.*—Netherlands Government raised loan of £1,354,000 from United States Government to help support co-operative housing project for Dutch migrants to Australia. Additional finance to be raised in Australia and Holland to total of £8 to £12 million in next ten years.

*7th July.*—Trade mission to New Zealand opened discussions with New Zealand Trade Authorities.

*9th July.*—Ceylonese Trade Delegation visited Australia.

*17th July.*—Agreement reached between New South Wales, Victoria, South Australia and Commonwealth on Snowy Mountains and Murray Waters agreements. New South Wales Government approved plan for £50 million chemical plant on Northern coalfields.

*31st July.*—Minister for Trade announced easing of restrictions on imports of capital equipment from dollar areas and exemption from licensing on other items.

*5th August.*—The Commonwealth Budget for 1958–59 was presented to the House of Representatives.

In 1957-58, receipts of the Consolidated Revenue Fund (excluding self balancing items) were £1,311,400,000. The expenditure (excluding self balancing items and the payment to the Loan Consolidation and Investment Reserve) amounted to £1,207,000,000. There was thus £104,400,000 available for payment to the Loan Consolidation and Investment Reserve. The main items of revenue were (1956-57 receipts shown in parentheses):—Income taxes, £650,400,000 (£620,300,000); Excise Duties, £232,600,000 (£217,400,000); Customs Duties, £71,700,000 (£68,600,000); and Sales Tax, £137,800,000 (£125,800,000). The main items of expenditure were Payments to or for the States, £270,600,000 (£244,100,000 in 1956-57); Social and Health Services, £247,500,000 (£223,900,000); Defence Services, £185,100,000 (£188,500,000); War and Repatriation Services, £127,900,000 (£125,700,000); and Capital Works and Services, £123,500,000 (£107,800,000).

Loan money required for the approved Loan Council programmes for State Works and Housing and for War Service Land Settlement was £208,700,000. This was obtained from the following sources—Public loans in Australia, £101,200,000; State Domestic raisings, £3,100,000; New York loan, £10,900,000; and Commonwealth sources, £93,500,000. After providing £62,900,000 for redemption of maturing securities there was an overall cash surplus of £10,300,000 of which £10,000,000 was used to redeem Treasury Bills.

The Budget for 1958-59 provided for an estimated expenditure on ordinary Commonwealth services of £1,278,100,000 of which £1,200,100,000 would be provided from the Consolidated Revenue Fund and £78,000,000 from the Loan Fund. In addition it was expected that £102,000,000 would be available for payment to the Loan Consolidation and Investment Reserve. The main items of expenditure proposed were—Payments to the States, £287,500,000 (£270,600,000 in 1957-58); Social and Health Services, £273,800,000 (£247,500,000); Defence Services, £190,000,000 (£185,100,000); War and Repatriation Services, £130,000,000 (£127,900,000) and Capital Works and Services, £128,600,000 (£123,500,000).

Revenue from the main taxes was expected to be (1957-58 receipts shown in parentheses)—Income Taxes, £610,400,000 (£650,400,000); Excise Duties, £244,000,000 (£232,600,000); Customs Duties, £74,000,000 (£71,700,000); and Sales Tax, £147,000,000 (£137,800,000).

The amount to be borrowed for the approved Loan Council Programme for State Works and Housing and for War Service Land Settlement was £217,000,000. It was expected that £102,000,000 of this would have to be provided from Commonwealth resources. Overall it was expected that the Commonwealth would have a cash deficiency of £110,000,000 to be financed from the issue of Treasury Bills.

The Budget proposals provided for an increase of 10s. a week for age, invalid and widow pensioners who pay rent, a liberalization of the means test for all pensioners and increases in the special rate of War pension, pensions for children of deceased exservicemen and the domestic allowance paid to War widows. The living allowances paid to holders of Commonwealth scholarships were to be increased and the Commonwealth Scholarship Scheme extended to provide post-graduate awards. Income Tax concessions included increases in the Zone allowances and the deduction for calls paid on shares in Oil Exploration Companies.

*30th August.*—Trade Ministers of Australia and Ceylon issued joint statement on Trade discussions held in Colombo.

*13th September.*—Prime Minister opened Tumut Ponds dam on the Snowy River Scheme.

*15th September.*—Minister for Trade led Australian delegation to Commonwealth Trade and Economic Conference at Montreal.

*16th September.*—The 1958-59 Budget was presented to the New South Wales Legislative Assembly. During 1957-58, the transactions of the Consolidated Revenue Fund, Railways, Metropolitan and Newcastle Transport-Services and Sydney Harbour Services resulted in a surplus of £47,000. After providing for debt charges, there were deficits of £8,200,000 on the Railways and £1,400,000 on the Metropolitan and Newcastle Transport Services. The 1958-59 Budget provided for an overall surplus of £31,000. After meeting debt charges, it was estimated that there would be deficits of £6,500,000 on the Railways and £1,600,000 on the Metropolitan and Newcastle Transport Services.

*17th September.*—The 1958-59 Budget was presented to the Victorian Legislative Assembly. In 1957-58, expenditure exceeded revenue by £3,200,000. The deficit on the Railways was £6,000,000 and on the State Coal Mines £300,000. There was a surplus of £3,100,000 on General account. The Budget for 1958-59 provided for a total expenditure

of £154,200,000. It was estimated that revenue would be £152,500,000 leaving a deficit of £1,700,000. It was estimated that the deficit on the Railways would be £3,600,000 after providing for debt charges.

Budget proposals provided for increases in suburban rail fares, stamp duties on land transfers and hire purchase agreements, license fees for insurance business and probate and gift duties. The general exemption limit for land tax would be raised from £1,000 to £1,250.

*18th September.*—The 1958–59 Budget was presented to the South Australian House of Assembly. In 1957–58, revenue amounted to £70,600,000 and expenditure to £71,000,000 leaving a deficit of £400,000. For 1958–59, it was estimated that expenditure would be £73,400,000 and revenue £72,400,000 thus leaving a deficit of £1,000,000.

The 1958–59 Budget was tabled in the Tasmanian House of Assembly. The transactions of the Consolidated Revenue Fund in 1957–58 resulted in a deficit of £812,000. Receipts of the Consolidated Revenue Fund totalled £20,800,000 and expenditure £21,600,000. For 1958–59 it was estimated that expenditure would be £22,800,000 and revenue £21,700,000 leaving a deficit of £1,100,000.

*25th September.*—The 1958–59 Budget was presented to the Western Australian Legislative Assembly. Financial transactions for the year 1957–58 resulted in a deficit of £1,100,000. For 1958–59, it was estimated that expenditure would be £61,800,000 and revenue £59,800,000 resulting in a deficit of £2,000,000.

*2nd October.*—The 1958–59 Budget was presented to the Queensland Legislative Assembly. In 1957–58 receipts of the Consolidated Revenue Fund were £88,000,000. Expenditure was £89,500,000 leaving a deficit of £1,500,000. Excluding the amount provided for reduction of the accumulated debit balance in the Consolidated Revenue Fund (£5,200,000) it was estimated that expenditure in 1958–59 would be £96,000,000. With revenue estimated at £94,200,000 there would be a deficit of £1,800,000.

*4th October.*—Trade mission arrived from Singapore for Trade talks with Australian Chambers of Manufacturers and Commerce.

*8th October.*—First issue of new "Special" Bonds of £10 units, with a limit of £5,000, bearing variable rates of interest and redemption bonuses according to the period held.

High Court ruled Queensland road transport levies valid.

*9th October.*—Victorian State Electricity Commission 5½ per cent. loan for 7, 10, or 25 years undersubscribed by £800,000 and Queensland S.E.C. loan of 5½ per cent. under-subscribed by £115,000.

*15th October.*—£Stg.15,000,000 Loan floated in London, the first Australian loan floated in London for 19 years. At 5½ per cent., issued at £98 Stg., this loan was over-subscribed.

*1st November.*—Savings Bank interest raised ¼ per cent. to 3 per cent. on balances up to £2,000.

*7th November.*—Work commenced on new £30,000,000 power station at Wangi, N.S.W. with a planned capacity of 60,000 kW.

*10th November.*—The full bench of the Industrial Commission granted marginal increases of 15–25 per cent. to steel workers.

*12th November.*—Mort's Dock closed down, due to unprofitable business conditions, after 104 years.

*24th November.*—New South Wales Act, the Annual Holidays Act, 1944–1958, assented to, providing for three weeks annual holidays for all N.S.W. workers.

*31st December.*—Industrial Arbitration (Female Rates) Amendment Act, 1958, of New South Wales assented to. This Act, providing for equal pay for male and female employees performing work of the same or a like nature, operated from 1st January, 1959.

## CHRONOLOGICAL TABLE.

### CHRONOLOGICAL TABLE OF CHIEF EVENTS SINCE THE ESTABLISHMENT OF SETTLEMENT IN AUSTRALIA.

NOTES.—For each earlier year this Table rarely contains more than two or three items; for recent years, however, in order to provide a wide cover of events, etc., it includes a much greater number. Both the nature of the Table and considerations of space render necessary a continual reduction in these items, and for more information the reader should therefore consult earlier issues.

The Government was centralized in Sydney, New South Wales, up to 1825, when Tasmania (Van Diemen's Land) was made a separate colony. In the Table, the names now borne by the States serve to indicate the localities.

Year.

- 1788 N.S.W.—Arrival of "First Fleet", under Captain Arthur Phillip, at Botany Bay. Land in vicinity being found unsuitable for settlement, the expedition moved to Sydney Cove, and formal possession of the colony was taken on 26th January. Formal proclamation of colony and establishment of regular government on 7th February. Branch Settlement established at Norfolk Island. French navigator La Perouse visited Botany Bay. First cultivation of wheat and barley. First grape vines planted.
- 1789 N.S.W.—First wheat harvested at Parramatta, near Sydney. Discovery of Hawkesbury River.
- 1790 N.S.W.—Scarcity of provisions. "Second Fleet" reached Port Jackson. Landing of the New South Wales Corps.
- 1791 N.S.W.—Arrival of "Third Fleet". Territorial seal brought by Governor King.
- 1792 N.S.W.—Visit of *Philadelphia*, first foreign trading vessel.
- 1793 N.S.W.—First free immigrants arrived in *Bellona*. First Australian church opened at Sydney. Tas.—D'Entrecasteaux discovered the Derwent River.
- 1794 N.S.W.—Establishment of settlement at Hawkesbury River.
- 1795 N.S.W.—Erection of the first printing press at Sydney. Descendants of strayed cattle discovered at Cowpastures, Nepean River.
- 1796 N.S.W.—First Australian theatre opened at Sydney. Coal discovered by fishermen at Newcastle.
- 1797 N.S.W.—Introduction of merino sheep from Cape of Good Hope.
- 1798 Tas.—Insularity of Tasmania proved by voyage of Bass and Flinders.
- 1800 N.S.W.—Hunter River coal-mines worked. First Customs House in Australia established at Sydney. Flinders' charts published.
- 1801 N.S.W.—First colonial manufacture of blankets and linen.
- 1802 Vic.—Discovery of Port Phillip by Lieut. Murray. Q'land.—Discovery of Port Curtis and Port Bowen by Flinders. S.A.—Discovery of Spencer and St. Vincent Gulfs by Flinders.
- 1803 N.S.W.—First Australian wool taken to England by Capt. Macarthur. Issue of *The Sydney Gazette*, first Australian newspaper. Vic.—Attempted settlement at Port Phillip by Collins. Discovery of Yarra by Grimes. Tas.—First settlement formed at Risdon by Lieut. Bowen.
- 1804 Vic.—Abandonment of settlement at Port Phillip. Tas.—Foundation of settlement at Hobart by Collins.
- 1805 N.S.W.—First extensive sheep farm established at Camden by Capt. Macarthur.
- 1806 N.S.W.—"The great flood" on the Hawkesbury. Shortage of provisions. Tas.—Settlement at Launceston.
- 1807 N.S.W.—First shipment of merchantable wool (245 lb.) to England.
- 1808 N.S.W.—Deposition of Governor Bligh.
- 1809 N.S.W.—Free school established.
- 1810 N.S.W.—Post Office officially established at Sydney.
- 1813 N.S.W.—Passage across Blue Mountains discovered by Wentworth, Lawson and Blaxland. Macquarie River discovered by Evans.

- Year.
- 1814 N.S.W.—Flinders suggested the name "Australia", instead of "New Holland". Creation of Civil Courts.
- 1815 N.S.W.—First steam engine in Australia erected at Sydney. Lachlan River discovered by Evans. Tas.—Arrival of first immigrant ship with free settlers. First export of wheat to Sydney.
- 1816 N.S.W.—Sydney Hospital opened.
- 1817 N.S.W.—Oxley's first exploration inland. Discovery of Lakes George and Bathurst and the Goulburn Plains by Meehan and Hume. First bank in Australia—Bank of New South Wales—opened at Sydney.
- 1818 N.S.W.—Liverpool Plains, and the Peel, Hastings and Manning Rivers discovered by Oxley, and Port Essington (N.T.) by Captain King.
- 1819 N.S.W.—First Savings Bank in Australia opened at Sydney.
- 1820 Tas.—First importation of pure merino sheep from Camden Park (N.S.W.) flocks.
- 1821 Tas.—Establishment of penal settlement at Macquarie Harbour.
- 1822 N.S.W.—Formation of Agricultural Society of New South Wales.
- 1823 N.S.W.—New South Wales Judicature Act passed. Discovery of gold at Fish River by Assistant-Surveyor McBrien. Qld.—Brisbane River discovered by Oxley.
- 1824 N.S.W.—Constituted a Crown Colony. Executive Council formed. Establishment of Supreme Court at Sydney, and introduction of trial by jury. First Australian Enactment (Currency Bill) passed by the Legislative Council. Proclamation of freedom of the press. First manufacture of sugar. Vic.—Hume and Hovell, journeying overland from Sydney, arrived at Corio Bay. Qld.—Penal settlement founded at Moreton Bay (Brisbane). Fort Dundas Settlement formed at Melville Island, N.T.
- 1825 Tas.—Van Diemen's Land (Tasmania) proclaimed a separate colony. Qld.—Major Lockyer explored Brisbane River to its source and discovered coal.
- 1826 N.S.W.—Settlement in Illawarra District. Vic.—Settlement at Corinella, Western Port, formed by Captain Wright.
- 1827 Qld.—Darling Downs and the Condamine River discovered by Allan Cunningham. W.A.—Military settlement founded at King George's Sound by Major Lockyer. First official claim of British Sovereignty over all Australia.
- 1828 N.S.W.—Second constitution. First Census. Sturt's expedition down Darling River. Gas first used at Sydney. Richmond and Clarence Rivers discovered by Captain Rous. Vic.—Abandonment of settlement at Western Port. Qld.—Cunningham discovered a route from Brisbane to the Darling Downs, and explored Brisbane River.
- 1829 N.S.W.—Sturt's expedition down Murrumbidgee River. W.A.—Foundation of settlement at Swan River. Foundation of Perth.
- 1830 N.S.W.—Sturt, voyaging down Murrumbidgee and Murray Rivers, arrived at Lake Alexandrina. Tas.—Black line organized to force aborigines into Tasman's Peninsula, but failed. Small remnant subsequently (1830 to 1835) persuaded to settle on Flinders Island.
- 1831 N.S.W.—Crown lands first disposed of at auction. Mitchell's explorations north of Liverpool Plains. SS. *Surprise*, first steamship built in Australia, launched at Sydney. First coal shipped from Australian Agricultural Company's workings at Newcastle, N.S.W. First assisted immigration to N.S.W. S.A.—Wakefield's first colonization committee. W.A.—Appointment of Executive and Legislative Councils.
- 1832 N.S.W.—State Savings Bank established.
- 1833 N.S.W.—First School of Arts established at Sydney.
- 1834 N.S.W.—First settlement at Twofold Bay. Vic.—Settlement formed at Portland Bay by Henty Brothers. S.A.—Formation of the South Australian Association. W.A.—Severe reprisals against Murray River natives at Pinjarrah for continued attacks on settlers.
- 1835 Vic.—John Batman arrived at Port Phillip; foundation of Melbourne.

- Year.
- 1836 N.S.W.—Mitchell's overland journey from Sydney to Cape Northumberland (S.A.). Vic.—Proclamation of Port Phillip district as open for settlement. S.A.—Settlement founded at Adelaide under Governor Hindmarsh.
- 1837 N.S.W.—Appointment in London of Select Committee on Transportation. Vic.—First overlanders from Sydney arrived at Port Phillip.
- 1838 N.S.W.—Discontinuance of assignment of convicts. Qld.—Settlement of German missionaries at Brisbane—first free colonists. S.A.—“Overlanding” of cattle from Sydney to Adelaide along the Murray route by Hawden and Bonney. Settlement at Port Essington, Northern Territory, formed by Captain Bremer.
- 1839 N.S.W.—Gold found at Vale of Clwydd by Count Strzelecki. S.A.—Lake Torrens discovered by Eyre. Port Darwin discovered by Captain Stokes. W.A.—Murchison River discovered by Captain Grey.
- 1840 N.S.W.—Abolition of transportation to New South Wales. Land regulations—proceeds of sales to be applied to payments for public works and expenditure on immigration. Vic.—Determination of northern boundary. Qld.—Penal settlement broken up and Moreton Bay district thrown open. S.A.—Eyre began his overland journey from Adelaide to King George's Sound.
- 1841 N.S.W.—Gold found near Hartley. W.A.—Completion of Eyre's overland journey from Adelaide to King George's Sound. New Zealand proclaimed a separate colony.
- 1842 N.S.W.—Incorporation of Sydney. Vic.—Incorporation of Melbourne. S.A.—Discovery of copper at Kapunda.
- 1843 N.S.W.—First Representative Constitution (under Act of 1842). Qld.—Moreton Bay granted legislative representation as a distinct electoral division.
- 1844 Qld.—Leichhardt's expedition to Port Essington (N.T.). S.A.—Sturt's last expedition inland.
- 1845 N.S.W.—Mitchell's explorations on the Barcoo. Qld.—Explorations by Mitchell and Kennedy. S.A.—Discovery of the Burra copper deposits. Sturt discovered Cooper's Creek.
- 1846 N.S.W.—Initiation of meat-preserving. Qld.—Foundation of settlement at Port Curtis. S.A.—Proclamation of North Australia.
- 1847 N.S.W.—Iron-smelting commenced near Berrima. Overland mail established between Sydney and Adelaide. Qld.—Explorations by Leichhardt, Burnett and Kennedy.
- 1848 N.S.W.—National and Denominational School Boards established. Qld.—Leichhardt's last journey. Kennedy speared by the blacks at York Peninsula. Chinese brought in as shepherds.
- 1849 N.S.W.—Indignation of colonists at arrival of convict ship *Hashemy*. Exodus of population to gold-fields of California. Vic.—*Randolph* prevented from landing convicts. Qld.—Assignment of *Hashemy* convicts to squatters on Darling Downs. W.A.—Commencement of transportation to Western Australia.
- 1850 N.S.W.—Final abolition of transportation. Sydney University founded. Vic.—Gold discovered at Clunes. Representative government granted. S.A.—Representative government granted. W.A.—Pearl oysters found by Lieut. Helpman at Saturday Island Shoal. Tas.—Representative government granted.
- 1851 N.S.W.—Payable gold discovered by Hargreaves at Lewis Ponds and Summerhill Creek. Vic.—Port Phillip created an independent colony under the name of Victoria. Discovery of gold in various localities. W.A.—Proclamation of Legislative Council Act.
- 1852 N.S.W.—Arrival of *Chusan*, first P. and O. mail steamer from England. S.A.—First steamer ascended the Murray River to the junction with the Darling. Tas.—Meeting of first elective Council protested against transportation. Payable gold discovered at The Nook, near Fingal, and at Nine Mile Springs.
- 1853 Tas.—Abolition of transportation. Vic.—Melbourne University founded.
- 1854 Vic.—Opening of first Australian railway—Flinders Street to Port Melbourne. Riots on Ballarat gold-fields. Storming of the Eureka Stockade, 3rd Dec. Telegraph first used.

- Year.
- 1855 N.S.W.—Opening of railway—Sydney to Parramatta. Mint opened.
- 1856 N.S.W.—Pitcairn Islanders placed on Norfolk Island. W.A.—A. C. Gregory's expedition in search of Leichhardt.  
Responsible Governments in N.S.W., Vic., S.A. and Tas. (Act of 1855).
- 1857 N.S.W.—Select Committee on Federation. Vic.—Manhood suffrage and vote by ballot. S.A.—Passage of Torrens' Real Property Act.
- 1858 N.S.W.—Establishment of manhood suffrage and vote by ballot. Telegraphic communication between Sydney, Melbourne and Adelaide. Qld.—Canoona gold rush.  
Population of Australia reached 1,000,000.
- 1859 Qld.—Proclamation of Queensland as separate colony. Tas.—First submarine cable, via Circular Head and King Island to Cape Otway.
- 1860 Vic.—Burke and Wills left Melbourne and crossed to Gulf of Carpentaria. S.A.—Copper discoveries at Wallaroo and Moonta. McDouall Stuart reached centre of continent and named "Central Mount Stuart".
- 1861 N.S.W.—Anti-Chinese riots at Lambing Flat and Burrangong gold-fields. Opening of first tramway in Sydney. Regulation of Chinese immigration. Vic.—Burke and Wills perished at Cooper's Creek, near Innamincka, S.A.
- 1862 N.S.W.—Abolition of State aid to religion. Real Property (Torrens) Act passed. S.A.—Stuart crossed the Continent from south to north. W.A.—First export of pearl-shell.
- 1863 Vic.—Intercolonial Conference at Melbourne. S.A.—Northern Territory taken over. W.A.—Initiation of settlement in the north-west district. Henry Maxwell Lefroy discovered and traversed area now comprised in the Coolgardie-Kalgoorlie gold-field.
- 1864 Qld.—First sugar made from Queensland cane.
- 1865 N.S.W.—Destruction by fire of St. Mary's Cathedral, Sydney.
- 1866 N.S.W.—Passage of Public Schools Act of (Sir) Henry Parkes. S.A.—Introduction of camels for exploration, etc.
- 1867 Vic.—Imposition of protective tariff. Qld.—Discovery of gold at Gympie.
- 1868 W.A.—Arrival of *Hougmont*, last convict ship.
- 1869 Vic.—Record gold nugget "Welcome Stranger" 2,284 oz. found near Dunolly. W.A.—First telegraph line opened from Perth to Fremantle.
- 1870 N.S.W.—Intercolonial Exhibition opened at Sydney. Imperial troops withdrawn. Vic.—Intercolonial Congress at Melbourne. S.A.—Commencement of trans-continental telegraph.
- 1871 N.S.W.—Permanent military force raised. W.A.—Forrest's explorations. Tas.—Discovery of tin at Mount Bischoff.
- 1872 Vic.—Mint opened. S.A.—Cable from Java to Port Darwin. Completion of transcontinental telegraph line.
- 1873 N.S.W.—Intercolonial Conference at Sydney. First volunteer encampment. Inauguration of mail service with San Francisco.
- 1874 N.S.W.—Triennial Parliaments Act passed. Intercolonial Conference. S.A.—University of Adelaide founded. W.A.—John and Alexander Forrest arrived at Overland Telegraph from Murchison.
- 1875 Qld.—Transfer of Port Albany Settlement to Thursday Island.
- 1876 N.S.W.—Completion of cable—Sydney to Wellington. W.A.—Giles crossed colony from east to west. Tas.—Death of Truganini, last representative of Tasmanian aboriginals.
- 1877 W.A.—Opening of telegraphic communication with South Australia.  
Population of Australia reached 2,000,000.
- 1878 Qld.—Restriction of Chinese immigration.  
Introduction of telephone into Australia.
- 1879 N.S.W.—First artesian bore at Kallara Station, near Bourke. First steam tramway. W.A.—A. Forrest's explorations in the Kimberley district, and discovery of the Fitzroy pastoral country.

- Year.
- 1880 N.S.W.—Public Instruction Act passed. Vic.—First Australian Telephone Exchange opened in Melbourne.  
Federal Conference at Melbourne and Sydney.
- 1881 N.S.W.—Further restrictions on Chinese immigration.  
First Australia-wide censuses on same date taken.
- 1882 W.A.—Nugget of gold found between Roebourne and Cossack.
- 1883 N.S.W.—Discovery of silver at Broken Hill. Completion of railway between New South Wales and Victoria. Qld.—Annexation of New Guinea—repudiated by Imperial authorities.  
Federal Conference held at Sydney. Federal Council created.
- 1884 Federation Bill passed in Victoria and rejected in New South Wales. British protectorate declared over New Guinea.
- 1885 N.S.W.—Military contingent sent to the Sudan. Opening of the Broken Hill Proprietary Silver Mines. W.A.—Gold found by prospectors on the Margaret and Ord Rivers in the Kimberley district. Tas.—Silver-lead discovered at Mount Zeehan.
- 1886 Tas.—Discovery of gold and copper at Mount Lyell.  
First session of Federal Council held at Hobart on 26th January.
- 1887 W.A.—Gold discovered at Southern Cross.  
First "Colonial" Conference in London. Australasian Naval Defence Force Act passed.
- 1888 N.S.W.—Restrictive legislation against Chinese, imposing poll-tax of £100. Qld.—Railway communication opened between Sydney and Brisbane.  
Conference of Australian Ministers at Sydney to consider question of Chinese immigration. First meeting of the Australasian Association for the Advancement of Science held in Sydney.
- 1889 Qld.—Railway communication established between Brisbane and Adelaide. W.A.—Framing of new Constitution. Tas.—University of Tasmania founded.  
Population of Australia reached 3,000,000.
- 1890 W.A.—Responsible Government granted.  
Meeting at Melbourne of Australasian Federation Conference.
- 1891 N.S.W.—Arrival of Australian Auxiliary Squadron. Cessation of assisted immigration. W.A.—Discovery of gold on the Murchison.  
First Federal Convention in Sydney, draft bill framed and adopted.
- 1892 W.A.—Discovery of gold at Coolgardie.
- 1893 Financial crisis, chiefly affecting the eastern States.
- 1894 S.A.—Women's suffrage granted—first State to do so.
- 1895 N.S.W.—Free-trade tariff. Land and income taxes introduced.  
Conference of Premiers on Federation at Hobart.
- 1896 N.S.W.—People's Federal Convention at Bathurst. Vic.—Wages Board system established by Act of Parliament.
- 1897–8 Sessions of Federal Convention at Adelaide, Sydney and Melbourne.
- 1898 Draft Federal Constitution Bill submitted to electors in Victoria, New South Wales, South Australia and Tasmania. Requisite statutory number of votes not obtained in New South Wales.
- 1899 First contingent of Australian troops sent to South Africa. Conference of Premiers in Melbourne to consider amendments to Federal Constitution Bill. Referendum—Bill accepted by New South Wales, Victoria, Queensland, South Australia and Tasmania. First Labour Government (Queensland).
- 1900 N.S.W.—Old-age pensions instituted.  
Contingents of naval troops sent to China. Commonwealth Constitution Act received Royal Assent, 9th July. Proclamation of Commonwealth signed 17th September. Mr. (afterwards Sir) Edmund Barton formed first Federal Ministry.
- 1901 Proclamation of the Commonwealth at Sydney. First Commonwealth Parliament opened at Melbourne by the Duke of Cornwall and York. Interstate free-trade established.

## Year.

- 1902 Completion of Pacific Cable (all-British). First Commonwealth Tariff.
- 1903 Coolgardie and Kalgoorlie Water Supply Scheme completed. Inauguration of the Federal High Court.
- 1904 Commonwealth Conciliation and Arbitration Act.
- 1905 Population of Australia reached 4,000,000. Re-introduction of assisted immigration in New South Wales.
- 1906 Wireless telegraphy installed between Queenscliffe, Vic., and Devonport, Tas. Papua taken over by Commonwealth.
- 1907 First telephone trunk line service between Capital Cities, i.e., Sydney and Melbourne. Imperial Conference in London. Declaration of first basic wage in "Harvester Judgment".
- 1908 Canberra chosen as site of Australian Capital.
- 1909 Imperial Defence Conference in London. Visit of Lord Kitchener to report and advise on Australian military defence. Queensland University founded. Establishment of Commonwealth Age Pension Scheme.
- 1910 Penny Postage. Arrival of *Yarra* and *Parramatta*, first vessels built for the Royal Australian Navy. Australian Notes Act passed and first Commonwealth notes issued. Admiral Sir R. Henderson visited Australia to advise on naval defence.
- 1911 First Commonwealth Census. Transfer of Australian Capital Territory and Northern Territory to Commonwealth. Introduction of compulsory military training. University of Western Australia founded.
- 1912 Opening of Commonwealth Bank. First payments of Maternity Bonus. First sod of Trans-Australian Railway turned at Port Augusta.
- 1913 Australian Capital named Canberra and foundation stone laid. Appointment of Interstate Commission.
- 1914 Visit of General Sir Ian Hamilton to report on military defence scheme. Double dissolution of Commonwealth Parliament. Transfer of Norfolk Island to Commonwealth.  
European War declared 4th August. German possessions in South-West Pacific seized by Australian Naval and Military Expeditionary Force. German cruiser *Emden* destroyed by H.M.A.S. *Sydney* at Cocos Islands, 9th November. Australian and New Zealand Army Corps (ANZAC.) formed under Sir William Birdwood.
- 1915 Opening of Broken Hill Proprietary's Ironworks at Newcastle, N.S.W.  
Australian and New Zealand troops landed at Gallipoli, 25th April. Evacuation, 18th-20th December. Australian warships with Grand Fleet.
- 1916 Purchase of steamships by the Commonwealth.  
Australian and New Zealand mounted troops organized in mounted divisions and camel corps, operating thereafter in Egypt, Palestine and Syria. Other troops transferred to France. First proposal for compulsory military service overseas defeated by referendum.
- 1917 National Ministry formed under Rt. Hon. W. M. Hughes. Transcontinental (Kalgoorlie-Port Augusta) Railway completed.  
Australian Flying Corps operating with R.F.C. in Palestine and France. Second proposal for compulsory military service overseas defeated by referendum.
- 1918 Population of Australia reached 5,000,000. Australia House (Strand, London) opened by the King.  
Armistice with Germany, 11th November. Repatriation Commission created.
- 1919 Peace Conference. Return of Australian troops. England to Australia flight by Capt. (Sir) Ross Smith and Lieut. (Sir) Keith Smith. Peace Treaty signed at Versailles, 28th June.
- 1920 Visit to Australia of H.R.H. the Prince of Wales. Imperial Statistical Conference in London.
- 1921 Mandate over Territory of New Guinea given to Australia. First direct wireless press message, England to Australia. Second Commonwealth Census.

## Year.

- 1922 First lock on River Murray opened at Blanchetown, South Australia. Queensland Legislative Council abolished.
- 1923 First sod turned on the site of Commonwealth Parliament House at Canberra.
- 1924 Directorate of Commonwealth Bank appointed. Australian Loan Council formed.
- 1925 Population of Australia reached 6,000,000. Solar Observatory established at Canberra.
- 1926 Council for Scientific and Industrial Research established. Imperial Conference. Dominion Status defined.
- 1927 Transfer of Seat of Commonwealth Government from Melbourne to Canberra. Beam wireless established. Financial agreement between Commonwealth and States.
- 1928 State Debts referendum carried.
- 1929 Commonwealth Bank empowered to mobilize gold reserve. Abolition of peacetime compulsory military training in favour of voluntary system.
- 1930 Effects of world-wide severe economic depression felt throughout Australia. Brisbane-Grafton (N.S.W.) railway, first step towards uniform gauge railway communication between capitals of mainland States, opened. First Australian—Rt. Hon. Sir Isaac Alfred Isaacs, G.C.M.G., Chief Justice of the High Court—appointed Governor-General of Australia.
- 1931 Depression continued. Initiation of Premiers' Conference plan to meet the financial situation. Commonwealth Bank Act amended to provide for temporary lower reserve against notes. England departed from gold standard. Commonwealth Bank assumed control of exchange rate and lowered it to 125 (previously 130).
- 1932 Sydney Harbour Bridge opened. Australian Broadcasting Commission established. *Legislation passed enabling note reserve to be held in sterling securities. Imperial Economic Conference at Ottawa.*
- 1933 World Economic Conference in London. Secession Referendum carried (Western Australia). Antarctica and Ashmore and Cartier Islands taken over by the Commonwealth. Third Commonwealth Census.
- 1934 Inauguration of England-Australia Air Mail Service.
- 1935 Empire Statistical Conference at Ottawa.
- 1936 Joint Commonwealth and State Marketing Schemes invalidated by decision of the Privy Council in the James case. *Tasmania linked with mainland by submarine telephone cable.*
- 1937 Imperial Conference in London. Report of the Royal Commission on Monetary and Banking Systems in Australia.
- 1938 New Defence Programme involving expenditure of £63,000,000 over three years. New Trade Treaty with Japan.
- 1939 Population of Australia reached 7,000,000.  
*War declared on Germany, 3rd September. Royal Australian Navy placed at disposal of Great Britain. Advance party of Australians embarked for Middle East, 15th December.*
- 1940 Exchange of Ministers between Australia and United States of America marked Australia's entry into field of direct diplomatic representation with countries other than the United Kingdom.  
*First Australian convoy (6th Australian Division) sailed for Middle East. Cruiser Sydney crippled Italian cruiser Bartolomeo Colleoni.*
- 1941 Establishment of Commonwealth Child Endowment Scheme. United States Congress passed Lend-Lease Bill.  
*Arrival of units of Eighth Australian Division in Malaya. Sydney lost after fight with Kormoran. R.A.A.F. in defence of Britain, in Middle East and at Singapore. Australian forces engaged in Middle East, Greece, Crete and Syria. Japanese attack on Pearl Harbour. Australia declared war on Japan, 9th December.*

## Year.

- 1942 Federal uniform taxation adopted. Commonwealth widows' pensions introduced. Rationing of commodities.  
Japanese landed at Rabaul. Fall of Singapore. Darwin bombed. United States armed forces landed in Australia. Headquarters of South-West Pacific Command set up by General Douglas MacArthur in Melbourne. Coral Sea Battle. Japanese midget submarines in Sydney Harbour. Owen Stanley Ranges offensive. Ninth Australian Division at El Alamein (North Africa). Kokoda recaptured.
- 1943 Price Stabilization Scheme. Mortgage Bank Department of Commonwealth Bank opened. National Works Council formed.  
Australian forces combined with American forces to recapture many places in New Guinea. Commencement of long series of amphibious operations. R.A.A.F. from 1943 till end of war operated on all fronts.
- 1944 Pay-as-you-earn taxation operated from 1st July. Referendum refused Commonwealth Government increased powers in post-war period.  
Australian advances in northern New Guinea. Allied invasion of France. Australians landed on New Britain; took over from Americans in Bougainville, Solomon Islands, and at Aitape, New Guinea.
- 1945 Captain Cook Dock opened. Re-establishment and Employment Act. Banking Act to regulate banking and to protect the currency and public credit. Australia ratified United Nations Charter.  
Cessation of hostilities in Europe, 8th May. Cessation of hostilities against Japan, 15th August. General demobilization commenced.
- 1946 Cessation of man-power controls. Commonwealth Government accepted responsibility for supply and maintenance of BCOF in Japan. Inauguration of Commonwealth Employment Service. Joint Organization (Wool Disposal) commenced operations. Act to establish National University at Canberra. Commonwealth and State agreement on housing. Trans-Australia Airlines (Government) began operations. Constitution Alteration Referendum granted powers in respect of social services to Commonwealth.
- 1947 End of demobilization. Census of Australia—first since 1933. Australian National Antarctic Research Expedition to establish scientific research station at Heard Island. First "displaced persons" reached Australia.
- 1948 Forty-hour week effective throughout Australia. Membership of Commonwealth Parliament increased.
- 1949 Nationality and Citizenship Act operative. Broadcasting Control Board came into operation. New Guinea placed under international trusteeship and administrative union of Papua and New Guinea established. Certain Australian aboriginals for first time granted franchise at Commonwealth elections. Establishment of New South Wales University of Technology. Australian Whaling Commission established. Devaluation of Australian pound against American dollar to two dollars twenty-four cents. Commencement of Snowy Mountains Hydro-electric Power Scheme. Australia's population reached 8,000,000.
- 1950 Severe flooding in New South Wales. United Nations members engage in military operations to assist South Korea. Adult franchise for Victorian Legislative Council replaced existing franchise dependent on property qualifications. Conference of Commonwealth Prime Ministers in London.
- 1951 Opening of Jubilee celebrations to mark the fiftieth year of Australian federation. British Government's confirmation of transfer of Heard Island and the Macdonald Islands (Southern Indian Ocean) to Australia. Double dissolution of Commonwealth Parliament. Official cessation of hostilities with Germany. Security Treaty signed in Washington by the United States of America, Australia and New Zealand for action in the event of an armed attack in the Pacific. Japanese Peace Treaty signed at San Francisco. Third Conference of Government Statisticians of the British Commonwealth held in Canberra. Opening of new Legislative Council of Papua and New Guinea, which included, for the first time in the history of Australian Legislature, representatives of the native peoples.

Year.

- 1952 Nuclear experiments commenced at National University, Canberra. Widespread bushfires in south-eastern Australia. Important high-grade uranium deposits discovered at Rum Jungle, Northern Territory. 1st Battalion, The Royal Australian Regiment, sailed from Sydney for service in Korea. Severe restrictions imposed on imports from all sources and on amounts available for Australians travelling overseas. Agreement between the Commonwealth and South Australian Governments and the Combined Development Agency of the British and American Governments, on the development of uranium deposits at Radium Hill, South Australia. Central and south-west New South Wales experienced one of the worst floods in history. Representatives of New Zealand, the United States of America and Australia met at Honolulu to consider the Pacific defence pact (ANZUS.). Qantas Empire Airways began first direct service between Sydney and Johannesburg, South Africa. Britain's first atomic weapon detonated on the Monte Bello Islands, near the north-west coast of Australia. British Commonwealth Economic Conference in London.
- 1953 Premier's Conference in Canberra failed to reach agreement on return of income tax powers to States. 2nd Battalion sailed from Sydney for service in Korea. Bill introduced into Northern Territory Legislative Council to give citizenship rights to Northern Territory aboriginals, except those committed to State care. Atomic Energy Act 1953 established Atomic Energy Commission. Coronation of Her Majesty Queen Elizabeth the Second. Britain and Australia signed agreement for reciprocity in social services benefits. Conference of Commonwealth Prime Ministers held in London. Korean armistice signed by United Nations and Communist Forces. Commonwealth Court of Conciliation and Arbitration granted employers' applications for abandonment of the system of automatic adjustment of the basic wage in accordance with retail price index numbers. Oil discovered in Western Australia.
- 1954 Her Majesty the Queen, with His Royal Highness the Duke of Edinburgh, made first tour of Australia by reigning sovereign. Australian Antarctic Research Expedition established a station at Mawson to conduct meteorological and other research. Inaugural meeting of Nuclear Research Foundation. Mr. and Mrs. Vladimir Petrov of the Soviet Embassy granted political asylum. Soviet Government recalled its Embassy in Australia and Australian Embassy left Moscow. Royal Commission into espionage in Australia set up. At Washington, Australia took part in Five Power military talks on South-East Asia. Premier of South Australia announced two new uranium finds in north-east of State. Australian population census taken. At the Manila Conference Australia signed a treaty pledging collective defence against aggression in South-East Asia and the South-West Pacific. 3rd Battalion withdrawn from Korea. At Rum Jungle, Prime Minister officially opened first uranium treatment plant established in Australia. Atomic Energy Commission authorized to construct a nuclear reactor and research laboratories as part of a programme of co-operation in atomic research with the United Kingdom.
- 1955 Conference of British Commonwealth Prime Ministers held in London. Prime Minister visited Washington as guest of President Eisenhower to talk on defence policy and Australia's role in South-East Asia. First power generated from Snowy Mountains fed into New South Wales electricity system. Disastrous floods covered large areas of central west New South Wales and Hunter Valley. Australian population reached 9,000,000. All price control ended in New South Wales. Announced that Australia would make Salk polio vaccine at Melbourne. Privileges committee of Commonwealth Parliament found Messrs. Brown and Fitzpatrick guilty of serious breach of privilege. Both committed to prison for three months. Commonwealth Full High Court declared that recent legislation imposing a road tax on interstate hauliers was invalid. South Australian State Government's uranium treatment plant at Port Pirie began operations. First FAO. Conference to be held in Australia opened in Brisbane. First SEACDT defence talks to be held in Australia began in Melbourne. Australian task force left for Malaya. New South Wales Government re-introduced quarterly automatic basic wage adjustments. Cocos (Keeling) Islands became Territory under authority of Commonwealth.

Year.

- 1956 Dr. Roberto Regala appointed first Philippines Ambassador to Australia. Rent control lifted in Tasmania. SEATO military advisers conference opened in Melbourne. Disastrous floods in Queensland, New South Wales, Victoria and north-eastern Tasmania. High Court ruled that Arbitration Court had no power to impose penalties on those disobeying its orders. Prime Minister in Supplementary Budget announced immediate increases in company and sales taxation and excise and customs duties. Australia and Netherlands completed agreement under which 75,000 Dutch settlers would come to Australia in next five years. Lengthy industrial dispute in Queensland shearing industry. Australia and United Kingdom agreed on new multi-million pound programme for Woomera rocket range. Sweeping changes made in Commonwealth system of conciliation and arbitration by new Conciliation and Arbitration Act (*see* p. 412). States of New South Wales, Victoria, South Australia and Tasmania marked centenary of responsible government by special ceremonies. Australia's first ambassador to Burma appointed. Bilateral agreement signed between Australia and U.S.A. for peaceful uses of atomic energy. First Commissioner for Federation of Malaya in Australia appointed. Dispute over control of Suez Canal resulted in London conference of Canal users. Australian Prime Minister appointed as chairman of committee to place views of conference before the Egyptian President. Diplomatic relations between Australia and Egypt subsequently broken off. Regular television transmissions commenced in Australia. First atomic tests at Maralinga (South Australia). Australian Government agreed to provide sanctuary for up to 10,000 refugees from Hungarian political oppression. Australia and United Kingdom agreed on comprehensive trade pact to replace 24-year-old Ottawa Agreement. Olympic games held in Melbourne, opened by H.R.H. the Duke of Edinburgh. Antarctic expedition sailed with intention of establishing new station at Vestfold Hills as well as extending existing bases.
- 1957 Commonwealth Government representatives and chiefs of private trading banks met in Canberra to discuss changes in the banking system. Later, government introduced banking legislation to give effect to proposals, but bills were defeated in Senate. Third SEATO Council meeting held in Canberra, preceded by conference of military advisers. South-Pacific Commission Conference held in Canberra. Commonwealth Conciliation and Arbitration Commission granted 10s. increase in Commonwealth Basic Wage to operate from 15th May. Acting Prime Minister officially closed Adaminaby Dam outlet gates and water started filling the Adaminaby reservoir. Conference of British Commonwealth Prime Ministers opened in London. Commonwealth Government decided to grant United States additional air traffic rights from Australia to Antarctica, South Africa and South-East Asia for reciprocal rights across the United States for Australian airlines flying to Europe. International Geophysical Year commenced; over 250 Australian scientists participated. High Court ruled that interstate vehicles could not be compelled to register in New South Wales but upheld validity of a Victorian tax on commercial vehicles, including those engaged in interstate trade, imposed solely for the maintenance of roads. Agreements made with State Governments of Western Australia, South Australia and New South Wales for integration of statistical services. Queensland elections resulted in return of first non-labour government for 25 years. Full High Court upheld validity of uniform taxation legislation but declared invalid section giving priority to the Commonwealth. Commonwealth established National Capital Development Commission to co-ordinate the expansion of Canberra as the centre of Commonwealth administration. Australia set up remote automatic weather station at Taylor Glacier, 60 miles west of Mawson base. Mr. Gunn Lay Teik first High Commissioner for Malaya in Australia. Applications invited for grant of licences for commercial television stations in Brisbane, Adelaide, Perth and Hobart areas. Agreement made for standardization of gauge of Melbourne-Albury railway line. Murray Committee, appointed by Commonwealth Government to inquire into the future of Australian Universities, presented report (*see* p. 589). Japanese Prime Minister, Mr. Kishi, visited Australia. Committee, under chairmanship of Lieut.-General Sir Leslie Morshead, to review organization of Defence Departments recommended amalgamation of Supply and Defence Production Departments. International Training Centre in Fisheries Co-operatives and Training Administration opened in Sydney under sponsorship of Food and Agriculture Organization of the United Nations.

Year.

1958 Queensland and Victorian State statistical offices integrated with Commonwealth statistical services. Australian-Italian diplomatic missions raised to embassy level. Qantas commenced first regular round the world air service via San Francisco and New York. Australian Parliamentary delegation visited Japan. Mr. Macmillan, British Prime Minister, made a two-week visit to Australia, the first by a British Prime Minister in office, and discussed defence and economic affairs with the Australian Prime Minister and other leading politicians. Queen Elizabeth, the Queen Mother, made tour of Australia. Australia sent delegation, led by Sir Kenneth Bailey, to United Nations Conference at Geneva on Law of the Sea. Prime Minister of New Zealand visited Australia as guest of the Government and later returned for discussions with Prime Minister. British Commonwealth Trans-Antarctic Expedition completed crossing of Antarctic Continent. Sir Howard Florey opened John Curtin School of Medicine at Australian National University. Monash University Act provided for establishment of new university in Victoria, and authorized expenditure of up to £2 million for land and buildings, Mr. R. R. Blackwood appointed Chancellor. Australia co-operated with United States in maintaining research station at Wilkes, in Antarctica. All elected members of Northern Territory Legislative Council resigned in protest at treatment of report on Constitutional reform, but were later re-elected. Prime Minister officially opened Australia's first nuclear reactor at Lucas Heights, near Sydney. First radio-active isotopes produced by the station. Wide changes were made to Immigration Act, including the abolition of the dictation test. Adaminaby Dam, in Snowy Mountains Hydro-electric Scheme, completed two years ahead of schedule and tenders accepted for work on Upper Tumut. Tumut Ponds Dam opened by Prime Minister. Holford Report on development of Canberra released. Uruguay established Legation in Canberra. Agreement was reached between Commonwealth and States of New South Wales, Victoria and South Australia, on Snowy Mountains and Murray Waters Agreements. Australian delegation, led by the Minister for Trade, attended Commonwealth Trade and Economic Conference at Montreal. Minister for External Affairs led Australian delegation to ANZUS Council in Washington. Christmas Island (Indian Ocean) transferred to Australian Administration. High Court ruled Queensland road transport levies valid (c.f. N.S.W. & Vic., 1957). Conference in Canberra between Australia and Netherlands reached agreement on administrative problems of New Guinea. Oil discovered at Puri, New Guinea. Mort's Dock (Sydney, N.S.W.) closed down after 104 years. The Annual Holidays Act, 1944-1958, of New South Wales, provided for three weeks annual holidays for all N.S.W. workers. Prime Minister of Canada visited Australia for talks in Canberra with Federal Cabinet. New South Wales Act passed providing for equal pay for male and female workers performing similar tasks.

## STATISTICAL SUMMARY, AUSTRALIA.

NOTE.—(1) In most cases where figures are available back to 1861, these were shown in Official Year Book No. 39, pp. xxviii-xxix.

(2) Most of the statistics in this Summary relate to the periods shown in the table headings. In those comparatively few cases where the statistics relate to other periods, this is indicated in footnotes.

Item.	Year ended 30th June—							
	1892.	1902.	1912.	1922.	1932.	1942.	1952.	1958.
<b>DEMOGRAPHY(a)—</b>								
Population(b) { '000 Males ..	1,737	2,005	2,382	2,799	3,333	3,599	4,311	4,932
{ '000 Females ..	1,504	1,820	2,192	2,712	3,220	3,545	4,217	4,815
{ '000 Persons ..	3,241	3,825	4,574	5,511	6,553	7,144	8,528	9,747
Net Oversea Migration '000	26.9	3.0	74.4	17.5	-10.1	5.2	111.4	78.7
Marriages .. { Rate(c)	24	28	39	47	39	75	77	74
Divorces(d) and Judicial Separations .. { Rate(c)	7.5	7.3	8.8	8.6	6.0	10.6	9.2	7.6
Births .. { '000	190	399	522	1,502	1,955	3,330	7,327	6,374
{ Rate(c)	110	103	122	136	119	135	193	220
Deaths .. { '000	34.5	27.2	27.2	25.0	18.2	18.9	22.9	22.9
{ Rate(c)	47	46	48	54	57	71	82	85
Infant Deaths .. { '000	14.8	12.2	10.7	9.9	8.7	10.0	9.7	8.8
{ Rate(e)	12.7	10.7	8.4	9.0	5.0	5.3	4.9	4.7
{ Rate(e)	115.3	103.6	68.5	65.7	42.1	39.7	25.2	21.4
<b>WAGES (ADULT MALES)(a)—</b>								
Nominal Weekly Wage Index Numbers ..	(f)	848	1,000	1,826	1,752	1,997	4,495	6,261
Real Wage Index Numbers(g) ..	(f)	(f)	1,000	1,087	1,210	1,194	1,439	{ (h)1,470 (i)1,471
<b>PRODUCTION—</b>								
<b>Agricultural(j)—</b>								
Wheat .. { Area mill. acs.	3.3	5.1	7.4	9.7	14.7	12.0	10.4	8.8
{ Yield mill. bus.	26	39	72	129	191	167	160	98
{ Av. Yield bus.	7.7	7.5	9.6	13.3	12.9	13.9	15.4	11.0
Oats .. { Area '000 acs.	246	461	617	733	1,085	1,460	2,365	2,958
{ Yield mill. bus.	5.7	9.8	9.6	12.1	15.2	22.3	34.5	31.4
{ Av. Yield bus.	23.3	21.2	15.5	16.6	14.0	15.3	14.6	10.6
Barley .. { Area '000 acs.	68	75	116	299	342	784	1,118	1,212
{ Yield mill. bus.	1.2	1.5	2.1	6.1	6.3	18.0	21.9	30.5
{ Av. Yield bus.	17.3	20.4	17.7	20.4	18.4	23.0	19.6	14.4
Maize .. { Area '000 acs.	284	295	340	305	269	301	170	184
{ Yield mill. bus.	9.3	7.0	8.9	7.8	7.1	7.4	4.0	5.6
{ Av. Yield bus.	32.6	23.9	26.3	25.7	26.2	24.7	23.7	30.6
Hay .. { Area '000 acs.	942	1,688	2,518	2,995	2,635	2,758	1,549	2,237
{ Yield '000 tons	1,067	2,025	2,868	3,902	3,167	3,575	2,345	2,969
{ Av. Yield tons	1.13	1.20	1.14	1.30	1.20	1.30	1.51	1.33
Potatoes .. { Area '000 acs.	113	110	130	149	145	99	118	118
{ Yield '000 tons	380	323	301	388	397	333	509	575
{ Av. Yield tons	3.37	2.94	2.31	2.60	2.74	3.35	4.31	4.88
Sugar-cane { Area (k)'000acs.	45	87	101	128	242	255	282	376
{ Yield '000 tons	738	1,368	1,682	2,437	4,213	5,154	5,327	9,249
{ Av. Yield tons	16.2	15.7	16.7	19.0	17.4	20.3	18.9	24.6
Vineyards { Area '000 acs.	49	64	61	92	113	130	136	131
{ Wine mill. gals.	3.4	5.3	5.0	8.5	14.2	16.0	35.3	33.9
Total Area of Crops mill. acs.	5.4	8.4	12.1	15.4	21.2	20.5	19.8	21.5
<b>Pastoral, Dairying, etc.—</b>								
Livestock(l) { Horses mill.	1.6	1.6	2.3	2.4	1.8	1.6	0.9	0.7
{ Cattle ..	11.1	8.5	11.8	14.4	12.3	13.6	14.9	16.9
{ Sheep ..	106	72	97	86	111	125	118	149
{ Pigs ..	0.9	0.9	1.1	1.0	1.2	1.5	1.0	1.4
Wool(m) .. { mill. lb.	(a) 634	(a) 539	(a) 798	723	1,007	1,167	1,080	1,433
Butter .. { '000 tons	(a) 19	(a) 46	(a) 95	(a) 119	175	168	135	176
Cheese .. { ..	(a) 4.5	(a) 5.3	(a) 7.1	(a) 14.6	14.0	30.1	40.6	34.9
Meat(n)—								
Beef and Veal ..				{ 339	350	534	582	777
Mutton and Lamb ..	{ (f)	(f)	(f)	{ 218	307	372	282	411
Pork ..				{ 11.1	22.7	58.1	35.0	48.2
Bacon and Ham ..	{ (a) 7.5	(a) 15.2	(a) 23.8	{ 26.2	31.8	42.5	36.6	36.4
Total Meat ..	{ (f)	(f)	(f)	{ 608	727	1,027	949	1,286

(a) Year ended previous December. (b) At 31st December of previous year. (c) Number per 1,000 of mean population. (d) Decreases made absolute, including decreases for nullity of marriage. (e) Number per 1,000 live births. (f) Not available. (g) Index of nominal weekly wage rates for adult males divided by the "C" Series Retail Price index number. (h) Excludes price movement of potatoes and onions. (i) Includes price movement of potatoes and onions. (j) Season ending in year shown. (k) Cane cut for crushing. (l) As at 31st December of previous year for years to 1942, as at 31st March thereafter. (m) In terms of greasy. (n) Bone-in weight in terms of fresh meat; cured weight, bacon and ham.

## STATISTICAL SUMMARY, AUSTRALIA—continued.

NOTE.—See headnotes on page 1159.

Item.	Year ended 30th June—							
	1892.	1902.	1912.	1922.	1932.	1942.	1952.	1958.
<b>PRODUCTION—continued.</b>								
<b>Mineral(a)(b)—</b>								
Copper(c) .. '000 tons			(d)	(d)	13.5	20.9	17.9	56.7
Gold(c) .. '000 fine oz.	1,243	3,300	2,484	758	595	1,497	896	1,084
Lead(c) .. '000 tons	3.5	11.8	22.2	57.7	162.6	275.5	212.0	333.0
Zinc(c) .. .. .	(e)	(e)	190.3	20.7	97.5	170.0	189.2	292.0
Black Coal .. Mill. tons	4.4	6.9	10.6	12.8	8.4	14.2	17.6	19.9
Brown Coal .. .. .	..	..	(e)	0.1	2.2	4.6	7.8	10.7
<b>Forestry—</b>								
Sawn output of native timber mill. sup. ft.	(d)	(a) 452	(a) 605	590	237	914	1,393	1,400
<b>Factories—</b>								
Number of factories '000			14.5	18.0	21.7	27.0	45.8	54.0
Persons employed .. .. .	(f)	(f)	312	379	337	725	978	1,074
Salaries and wages paid £m.			28	68	56	180	612	929
<b>Value of production(g)—</b>								
Chemicals, etc. .. .. .			1.1	3.2	7.9	24.8	63.7	146.5
Industrial metals, etc. ..			12.0	23.6	22.8	119.9	413.1	695.8
Textiles, etc. .. .. .			6.9	21.0	6.5	21.0	56.6	91.5
Clothing .. .. .	(d)	(d)	7.5	19.2	11.1	23.6	81.1	108.1
Food, etc. .. .. .			11.8	27.2	28.7	53.2	141.1	224.9
Paper, etc. .. .. .			4.2	9.0	9.6	17.1	68.2	120.7
All groups .. .. .	23.3	29.1	47.5	112.5	111.0	316.5	1,024.9	1,728.7
Value of land and buildings ..	(d)	(d)	32.5	67.3	106.6	156.3	360.2	851.1
Value of plant and machinery..			31.4	78.1	121.5	169.2	412.5	1,021.4
<b>Net value of production(h)—</b>								
Agriculture .. .. . £m.	17.0	23.8	38.8	81.9	49.7	64.0	246.7	243.8
Pastoral .. .. .	31.3	27.2	52.7	75.1	43.0	85.4	400.5	447.6
Dairying .. .. .	6.0	7.6	16.1	35.3	22.6	34.3	103.8	128.0
Poultry .. .. .	1.9	2.0	4.0	9.0	5.7	6.5	31.5	27.3
Bee-farming .. .. .	0.1	0.1	0.1	0.1	0.1	0.4	0.8	1.6
Total, Rural .. .. .	56.3	60.7	111.7	201.4	121.1	190.6	783.3	848
Trapping .. .. .	(d)	(d)	(d)	(d)	1.5	5.0	6.7	6.4
Forestry .. .. .			4.8	9.1	3.9	10.2	37.9	50.0
Fishing and Whaling .. .. .	4.4	2.8	1.1	1.4	1.4	1.8	5.7	10.4
Mines and Quarries(i) .. .. .	12.1	22.0	23.3	20.0	13.5	33.4	97.2	128.9
Total, Non-Rural .. .. .	16.5	24.8	29.2	30.5	20.3	50.4	147.5	197.7
Total, Primary .. .. .	72.8	85.5	140.9	231.9	141.4	241.0	930.8	1,044.1
Factories(g) .. .. .	23.3	29.1	47.5	112.5	111.0	316.5	1,024.9	1,728.7
Total All Industries .. .. .	96.1	114.6	188.4	344.4	252.4	557.5	1,955.7	2,775.5
<b>BUILDING(j)—</b>								
Permits, New Dwellings { '000	(d)	(d)	(d)	(d)	2.1	9.7	32.8	41.4
.. All Buildings(k) { £m.					1.5	9.6	80.4	143.7
					4.6	13.5	116.4	229.9
<b>OVERSEA TRADE—</b>								
Imports .. .. . £m. f.o.b.	(a) 34	(a) 38	(a) 61	94	52	174	1,053	792
Exports .. .. . .. .	36	50	79	128	108	169	675	819
<b>Principal Exports(l)—</b>								
Wool .. .. . { Mill. lb.(m) ..	641	529	734	946	903	938	1,036	1,280
.. .. . { £m. f.o.b. ..	20	15	26	48	32	58	323	374
Wheat .. .. . { '000 tons ..	258	543	1,477	2,677	3,413	598	1,685	1,060
.. .. . { £m. f.o.b. ..	1.9	2.8	9.6	28.6	19.2	4.6	55.3	28.5
Flour .. .. . { '000 short tons	33	97	176	360	611	414	789	460
.. .. . { £m. f.o.b. ..	0.3	0.6	1.4	5.5	3.8	4.2	33.0	14.3
Butter .. .. . { mill. lb. ..	4	35	102	127	202	130	25	114
.. .. . { £m. f.o.b. ..	0.2	1.4	4.6	8.0	10.3	8.1	4.6	15.6

(a) Year ended previous December. (b) Breaks in the continuity of the series occurred in 1931 and 1951. (c) Mine production, i.e., metal content of minerals produced. (d) Not available. (e) Less than .05. (f) Owing to variation in classification, effective comparison is impossible. (g) For definition see page 151. (h) Gross value from 1891 to 1921-22. Prior to 1922 figures are for years ended previous December. For definitions of gross and net value see page 1085. (i) Incomplete. (j) Six capital cities and suburbs. (k) Includes additions and alterations. (l) Australian produce except gold, which includes re-exports. (m) In terms of greasy.

STATISTICAL SUMMARY, AUSTRALIA—continued.

NOTE.—See headnotes on page 1159.

Item.	Year ended 30th June—							
	1892.	1902.	1912.	1922.	1932.	1942.	1952.	1958.
<b>OVERSEA TRADE—continued.</b>	(a)	(a)	(a)					
Principal Exports(b)—continued.								
Hides and Skins £m. f.o.b.	0.9	1.3	3.2	3.1	2.3	6.0	17.1	25.4
Meats .. .. .	0.5	2.6	4.3	5.5	6.4	14.1	35.5	55.2
Fruit(c) .. .. .	..	0.2	0.5	3.0	4.8	4.0	19.5	34.8
Sugar .. .. .	..	(d)	(d)	(d)	2.5	2.6	6.9	35.0
Gold .. .. .	5.7	14.3	12.0	3.5	11.9	9.2	7.0	6.4
Silver and Lead(e) .. .. .	1.9	2.3	3.2	2.7	2.9	7.4	32.1	29.1
Ores and Concentrates .. .. .	..	(d)	3.7	0.8	0.2	1.3	20.4	15.9
Principal Imports—								
Vegetable foodstuffs, etc. .. .. .		3.6	3.7	4.0	2.6	6.1	25.0	26.6
Apparel, etc. .. .. .		10.9	16.2	31.0	15.4	32.7	203.6	108.5
Oil, etc. .. .. .	(f)	1.2	1.6	4.7	5.5	16.2	87.5	101.7
Metals, etc. .. .. .		7.8	14.0	22.8	7.4	71.8	392.9	282.4
Rubber, etc. .. .. .		0.5	1.4	1.7	0.8	3.2	35.1	16.6
Paper, etc. .. .. .		1.6	2.6	4.4	4.4	4.3	68.8	45.1
<b>TRANSPORT AND COMMUNICATION—</b>								
Shipping—								
Oversea Vessels, } No. ..	3,778	4,028	4,174	3,111	3,057	2,544	4,136	5,265
Entrances and } mill. tons	4.7	6.5	10.0	9.1	11.4	10.8	18.2	24.6
Clearances .. .. .								
Oversea Cargo—								
Discharged .. .. .			(f)	2.4	3.0	5.5	14.4	16.6
Shipped .. .. .			(f)	5.8	6.7	4.2	5.7	8.9
Interstate Vessels, } No. ..	(f)	(f)	9,605	9,782	7,957	9,100	7,524	8,103
Entrances and } mill. tons			13.1	12.8	11.1	12.9	15.8	20.0
Clearances .. .. .								
Interstate Cargo Shipped } mill. tons(g)			(f)	5.5	4.0	10.0	9.0	13.8
Government Railways—		(h)	(h)					
Route-miles '000	10.4	12.8	16.8	23.5	27.0	27.2	26.8	26.4
Passenger-journeys mill.	84	115	228	335	303	475	501	494
Goods and livestock carried } mill. tons	9.4	15.5	25.5	31.5	26.1	38.9	44.3	45.2
Train-miles run .. .. .	29.7	38.2	55.2	56.1	63.8	88.5	93.4	90.3
Tramways and Omnibuses—								
Passenger-journeys—								
Trams .. .. .			360	569	589	874	689	479
Omnibuses(i) .. .. .	(f)	(f)	(f)	(f)	(f)	193	330	323
Motor vehicles on the register—								
Cars .. .. .			(f)	102	420	451	1,026	1,676
Commercial vehicles .. .. .					96	251	585	735
Civil Aviation (Internal)—								
Plane-miles flown .. .. .					2.5	7.8	41.8	40.5
Passengers carried .. .. .					57	152	1,829	2,123
Passenger-miles .. .. .					(f)	76	722	899
Freight car- '000 short tons } mill. ton-miles					0.1	1.2	57.5	70.0
Postal—					(f)	0.9	26.7	33.0
Postal matter dealt with(k) } mill. articles	286	365	680	778	887	1,124	1,482	1,895
Telegrams and cablegrams mill.	10.0	9.9	13.3	16.8	13.9	26.1	29.8	22.9
Telephones—								
Instruments .. .. .	7	29	103	259	485	739	1,301	1,937
Lines .. .. .	(f)	25	85	196	364	531	927	1,362
Calls—Trunk .. .. .	(f)	(f)	(f)	14.0	28.9	45.3	69.4	112.6
Local .. .. .	(f)	(f)	(f)	221	369	664	968	1,295
Broadcast Listeners' Licences '000				(l) 36	369	1,320	1,961	2,138
<b>PUBLIC FINANCE—</b>								
Commonwealth—								
Consolidated Revenue Fund—		(h)	(h)					
Revenue .. .. .	..	11	21	64	72	210	1,017	1,324
Expenditure .. .. .	..	4	15	64	72	210	1,017	1,324
Net loan fund expenditure .. .. .	..	..	1	5	4	213	55	60
Taxation collections .. .. .	..	9	16	50	54	180	934	1,162

(a) Year ended previous December. (b) Australian produce except gold, which includes re-exports. (c) Excludes fruit juices. (d) Less than .05. (e) Includes concentrates. (f) Not available. (g) Tons weight plus tons measurement. (h) Year ended 30th June. (i) Government and municipal only. (j) Excludes the Northern Territory. (k) Letters, post-cards, lettercards, newspapers, packets, parcels and registered articles. (l) Year 1923-24.

STATISTICAL SUMMARY, AUSTRALIA—*continued.*

NOTE.—See headnotes on page 1159.

Item.	Year ended 30th June—							
	1892.	1902.	1912.	1922.	1932.	1942.	1952.	1958.
<b>PUBLIC FINANCE—<i>continued.</i></b>								
State—								
Consolidated Revenue Funds—								
Revenue .. ..	£m.	(a) 28	41	85	100	152	388	603
Expenditure .. ..	£m.	(a) 29	41	87	121	149	392	612
Net loan expenditure(b)	£m.	(a) 9	16	34	6	8	198	157
Taxation collections ..	£m.	(a) 3	5	18	33	57	63	128
Public Debt(c)—								
Commonwealth .. ..	£m.	..	6	354	319	638	1,869	1,735
State .. ..	£m.	(d) 155	213	279	519	789	911	1,396
Total .. ..	£m.	(d) 155	213	285	873	1,108	1,549	3,983
Overseas .. ..	£m.	(a) ..	(a) 194	412	522	516	406	429
In Australia .. ..	£m.	(a) ..	(a) 91	461	586	1,033	2,859	3,554
Private Finance—								
Commonwealth Note Issue(e)	£m.	(a) ..	(a) 8	54	51	103	303	388
All cheque-paying banks—								
Advances(f)	£m.	(d) 125	94	109	183	261	324	817
Deposits(f)	£m.	(d) 98	91	143	289	319	483	1,353
Bank clearings(d)	£m.	(a) ..	(a) 338	662	1,702	1,581	2,828	12,160
Savings bank deposits(g)	£m.	(d) 15	31	59	154	198	274	892
Life Assurance(d)(h)—								
Ordinary—								
Policies .. ..	'000	..	414	484	730	871	1,340	2,553
Sum assured .. ..	£m.	..	108	109	181	285	463	1,212
Industrial—								
Policies .. ..	'000	(a) ..	236	467	973	1,550	2,780	3,843
Sum assured .. ..	£m.	(a) ..	5	10	30	67	127	254
Total .. ..	'000	..	650	951	1,703	2,421	4,120	6,396
Sum assured .. ..	£m.	..	113	119	211	352	590	1,466
SOCIAL STATISTICS—								
Commonwealth Social Services—								
Age and Invalid .. ..	'000(c)	..	..	90	144	256	336	420
Pensions .. ..	£m.	..	..	2.2	5.4	11.1	19.3	59.8
Child Endowment, .. ..	'000(c)	..	..	..	..	..	488	1,205
Claims in force .. ..	£m.	..	..	..	..	..	11.3	46.6
Total Commonwealth Health .. ..	£m.	..	..	2.2	6.1	11.5	30.9	137.6
and Social Services(i)	£m.	..	..	..	225	274	220	525
War Pensions .. ..	'000(c)	..	..	..	7.0	7.4	7.5	31.8
Service Pensions .. ..	'000(c)	..	..	..	..	..	14	17
State Social Services(j)—	£m.	..	..	..	..	..	0.6	1.8
Education(d)—								
Government Schools—								
Schools .. ..	'000	6.2	7.0	8.0	9.4	10.1	9.5	7.6
Staff .. ..	..	12.6	14.5	17.0	26.1	33.8	32.1	36.7
Students .. ..	..	561	638	639	819	937	887	1,013
Non-government Schools—								
Schools .. ..	'000	2.0	2.5	1.9	1.7	1.8	1.9	2.1
Staff .. ..	..	6.0	8.3	7.8	8.8	10.0	11.4	13.3
Students .. ..	..	125	149	161	199	221	257	326
Universities(k)—								
Number .. ..	..	4	4	5	6	6	8	9
Staff(l)	..	(a)	(a)	249	482	703	1,416	3,082
Students .. ..	'000	1.6	1.8	3.4	8.0	9.8	13.9	31.7
Public Hospitals—								
Number .. ..	..	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Staff—Medical .. ..	'000	(a)	(a)	1.1	1.5	3.2	3.9	6.9
Nursing .. ..	..	(a)	(a)	5.1	6.8	9.3	15.4	24.6
In-patients, cases treated ..	..	n o 54	(a) 91	134	215	371	595	896
POLICE AND PRISONS(d)—								
Police .. ..	'000	5.3	5.8	6.4	6.9	8.6	9.7	14.1
Prisons .. ..	..	(a)	(a)	104	91	85	70	69
Prisoners .. ..	'000	(a)	(a) 4.3	3.1	2.9	4.2	3.2	4.4
PRICES(d)—								
"C" Series Retail Price Index (p)	..	..	1,000	1,680	1,448	1,673	3,124	(q)4,259 (r)4,257

(a) Not available. (b) Loan Expenditure on works, services, etc. (c) At 30th June.  
(d) Year ended previous December. (e) At end of June. (f) Figures for 1892 are averages of weekly balance for the December quarter; the remainder are for the June quarter. (g) 1891 at 31st December, thereafter at 30th June. (h) Existing business in Australia. (i) Excludes war and service pensions. (j) Includes Northern Territory and Australian Capital Territory. (k) Excludes Australian National University. (l) Teaching and research staff. Includes part-time. (m) Not yet available. (n) Year 1891-92 for Victoria. (o) South Australia includes Adelaide Hospital only. (p) Base: 1911=1,000. (q) Excludes price movement of potatoes and onions. (r) Includes price movement of potatoes and onions.

## APPENDIX.

(Some recent information which has come to hand since the various chapters were sent to press is given hereunder in summarized form. For further or more detailed information, and for the latest available statistics, reference should be made to other publications issued by this Bureau (see p. 1118), notably the *Monthly Review of Business Statistics* and the *Quarterly Summary of Australian Statistics*.)

## CHAPTER II.—PHYSIOGRAPHY.

## § 2. Climate and Meteorology of Australia.

**Rainfall: Australian Capital Cities, p. 48.**—Rainfall recorded in Australian capital cities during 1958 was as follows:—Canberra, 30.23 ins.; Perth, 32.08 ins.; Adelaide, 17.57 ins.; Brisbane, 46.61 ins.; Sydney, 59.19 ins.; Melbourne, 26.98 ins.; Hobart, 36.55 ins.

## CHAPTER III.—GENERAL GOVERNMENT.

## § 1. Scheme of Parliamentary Government.

**5. Members' Salaries, p. 70.**—(i) *Commonwealth.* Following on recommendations made by the Richardson Committee, the Ministers of State Act 1959 and the Parliamentary Allowances Act 1959 were passed, increasing the salaries and allowances of Ministers and Members of the Senate and the House of Representatives as from 1st March, 1959.

The new basic salary of Members is £2,750 with electoral allowances varying from £800 to £1,050. Additional salaries payable to Ministers of State range from £2,250 for Junior Ministers to £7,250 for the Prime Minister. The Acts also provide for more liberal retiring allowances to members.

(ii) *Victoria.*—The salary payable to members of the two Houses of Parliament in Victoria was increased to £2,000 per annum from 19th April, 1959. Electorate allowances varying from £550 per annum for Metropolitan electorates to £950 for outer country electorates are additional to basic salary. Ministerial salaries, additional to their salaries as Members, are £3,000 salary and £1,500 expense allowance for the Premier, £2,250 salary and £700 allowance for the Deputy Premier, and £1,500 salary and £600 allowance for other Ministers.

## § 2. Parliaments and Elections.

**State Elections, p. 75.**—Elections were held during 1959 in New South Wales, South Australia, Western Australia and Tasmania. Particulars of the voting in each State are set out in the following table:—

State.	Electors Enrolled— Whole State.			Contested Electorates.					
				Electors who Voted.			Percentage of Electors who Voted.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales ..	904,921	945,754	1,850,675	856,071	883,510	1,739,581	94.60	93.42	94.00
South Australia ..	(a)	(a)	497,456	(a)	(a)	400,531	(a)	(a)	93.95
Western Australia ..	181,298	180,331	361,629	134,130	135,192	269,322	91.81	92.91	92.36
Tasmania ..	89,034	91,310	180,344	85,120	85,439	170,559	95.60	93.57	94.57

(a) Not available.

### § 3. Administration and Legislation.

#### Governors and State Ministers, pp. 82-84.—(i) *New South Wales*—

*Ministry (from 1st April, 1959).*

<i>Premier and Colonial Treasurer—</i> THE HON. J. J. CAHILL, M.L.A.	<i>Minister for Transport—</i> THE HON. A. G. ENTICKNAP, M.L.A.
<i>Deputy Premier and Minister for Education—</i> THE HON. R. J. HEFFRON, M.L.A.	<i>Minister for Housing and Minister for Cooperative Societies—</i> THE HON. A. LANDA, M.L.A.
<i>Attorney-General, Minister of Justice and Vice-President of the Executive Council—</i> THE HON. R. R. DOWNING, M.L.C.	<i>Minister for Conservation—</i> THE HON. E. WETHERELL, M.L.A.
<i>Colonial Secretary and Minister for Tourist Activities—</i> THE HON. C. A. KELLY, M.L.A.	<i>Minister for Agriculture—</i> THE HON. R. B. NOTT, M.L.A.
<i>Minister assisting the Premier and Colonial Treasurer—</i> THE HON. P. D. HILLS, M.L.A.	<i>Minister for Labour and Industry—</i> THE HON. J. J. MALONEY, M.L.C.
<i>Minister for Health—</i> THE HON. W. F. SHEAHAN, Q.C., M.L.A.	<i>Secretary for Mines—</i> THE HON. J. B. SIMPSON, M.L.A.
<i>Minister for Child Welfare and Minister for Social Welfare—</i> THE HON. F. H. HAWKINS, M.L.A.	<i>Secretary for Lands—</i> THE HON. J. M. A. MCMAHON, M.L.A.
<i>Minister for Local Government and Minister for Highways—</i> THE HON. J. B. RENSHAW, M.L.A.	<i>Secretary for Public Works—</i> THE HON. P. N. RYAN, M.L.A.

#### (ii) *Western Australia*—

*Ministry (from 2nd April, 1959).*

<i>Premier, Treasurer and Minister for Tourists—</i> THE HON. D. BRAND, M.L.A.	<i>Minister for Mines and Housing—</i> THE HON. A. F. GRIFFITH, M.L.C.
<i>Deputy Premier, Minister for Education and Electricity and Attorney-General—</i> THE HON. A. F. WATTS, C.M.G., M.L.A.	<i>Minister for Lands, Forests and Immigration—</i> THE HON. W. S. BOVELL, M.L.A.
<i>Minister for Industrial Development, Railways and the North-West</i> THE HON. C. W. M. COURT, O.B.E., M.L.A.	<i>Minister for Transport, Police, Labour and Native Welfare—</i> THE HON. C. C. PERKINS, M.L.A.
<i>Minister for Agriculture—</i> THE HON. C. D. NALDER, M.L.A.	<i>Chief Secretary and Minister for Health and Fisheries—</i> THE HON. R. HUTCHINSON, D.F.C., M.L.A.
<i>Minister for Works and Water Supplies—</i> THE HON. G. P. WILD, M.B.E., M.L.A.	<i>Minister for Local Government, Town Planning and Child Welfare—</i> THE HON. L. A. LOGAN, M.L.C.

#### (iii) *Tasmania*—

*Ministry (from 26th August, 1958).*

<i>Premier, Treasurer and Minister for Mines—</i> THE HON. E. E. REECE, M.H.A.	<i>Minister for Education—</i> THE HON. W. A. NEILSON, M.H.A.
<i>Attorney-General—</i> THE HON. R. F. FAGAN, M.H.A.	<i>Minister for Transport—</i> THE HON. J. B. CONNOLLY, M.L.C.
<i>Minister for Agriculture—</i> THE HON. J. J. DWYER, V.C., M.H.A.	<i>Minister for Housing—</i> THE HON. J. L. MADDEN, M.H.A.
<i>Chief Secretary and Minister Administering the Department of Health Services—</i> THE HON. J. F. GAHA, M.H.A.	<i>Minister for Lands and Works—</i> THE HON. D. A. CASHION, M.H.A.
	<i>Minister for Forests—</i> THE HON. A. C. ATKINS, M.H.A.

**Leaders of the Opposition, Commonwealth and State Parliaments, p. 84.**—*New South Wales*: Mr. L. W. Askin, M.L.A., replaced Mr. P. H. Morton as from 17th July, 1959.

*Western Australia*: With the change of Government after the elections of 21st March, 1959, the Hon. A. R. G. Hawke, M.L.A., became Leader of the Opposition.

### § 5. Cost of Parliamentary Government, p. 88.

The cost of Parliamentary Government, Commonwealth and individual States, for the year 1957-58 was as follows:—

Commonwealth, £2,661,604 (5s. 6d. per head); New South Wales, £783,001 (4s. 3d.); Victoria, £660,805 (4s. 11d.); Queensland, £538,365 (7s. 8d.); South Australia, £322,875 (7s. 3d.); Western Australia, £434,256 (12s. 5d.); Tasmania, £242,064 (14s. 6d.); and total, £5,642,970 (11s. 7d.).

The amounts expended under the major headings for all Governments during 1957-58 were:—Governor-General or Governor, £289,049; Official Establishments, £158,009; Ministry, £340,764; Parliament, £3,836,124; Electoral, £992,929.

### CHAPTER VI.—MANUFACTURING INDUSTRY.

Summary, p. 153.—The following table gives a summary of operations in manufacturing industries during 1957-58.

#### FACTORIES: 1957-58, SUMMARY.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1. Factories .. .. . No.	22,270	16,426	5,528	4,168	3,941	1,655	53,988
2. Persons employed(a) .. .. .	445,802	357,143	101,844	92,472	48,462	28,084	1,073,807
3. Salaries and wages paid(b) £'000	396,692	310,540	78,958	79,844	37,935	25,321	929,290
4. Value of power, fuel, light, etc., used .. .. . £'000	73,452	42,762	13,152	14,933	9,425	5,074	158,798
5. .. materials used .. .. . £'000	1,016,928	768,459	248,647	183,880	111,525	56,922	2,386,361
6. .. production(c) .. .. . £'000	757,862	566,476	143,958	133,285	75,312	51,830	1,728,723
7. .. output .. .. . £'000	1,848,242	1,377,697	405,757	332,098	196,262	113,826	4,273,882
8. .. land and buildings .. .. . £'000	350,169	280,207	63,927	61,084	36,846	59,453	851,686
9. .. plant and machinery .. .. . £'000	415,838	310,879	104,598	79,336	63,840	46,860	1,021,351

(a) Average over whole year; includes working proprietors. (b) Excludes amounts drawn by working proprietors. (c) Value of production equals figures in line 7 less totals of figures in lines 4 and 5.

Value of Production in Classes of Industry, p. 176.—The following table shows, for the year 1957-58 the value of production in Australia for the various classes of industry.

#### FACTORIES: VALUE OF PRODUCTION, AUSTRALIA, 1957-58. (£'000.)

Class of Industry.	Value of Production, 1957-58.
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	40,542
II. Bricks, Pottery, Glass, etc. .. .. .	34,319
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	145,659
IV. Industrial Metals, Machines, Conveyances .. .. .	694,496
V. Precious Metals, Jewellery, Plate .. .. .	7,929
VI. Textiles and Textile Goods (not Dress) .. .. .	91,498
VII. Skins and Leather (not Clothing or Footwear) .. .. .	16,390
VIII. Clothing (except Knitted) .. .. .	108,070
IX. Food, Drink and Tobacco .. .. .	224,936
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. .. .	83,053
XI. Furniture of Wood, Bedding, etc. .. .. .	28,701
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .. .	120,706
XIII. Rubber .. .. .	30,209
XIV. Musical Instruments .. .. .	2,105
XV. Miscellaneous Products .. .. .	34,019
XVI. Heat, Light and Power .. .. .	66,091
<b>Total .. .. .</b>	<b>1,728,723</b>

## CHAPTER IX.—POPULATION.

## § 3. Growth and Distribution of Population.

**Principal Urban Areas, p. 286.**—The following table shows estimates of the population of the principal urban areas in South Australia as at 30th June, 1958, and also the population recorded in Canberra at the population count conducted at the end of June, 1959:—

City or Town.						Population.
<b>South Australia.</b>						
Adelaide and Suburbs(a)	..	..	..	..	..	548,000
Port Pirie	..	..	..	..	..	15,100
Mount Gambier	..	..	..	..	..	13,200
Whyalla	..	..	..	..	..	9,200
Port Augusta	..	..	..	..	..	8,900
Port Lincoln	..	..	..	..	..	7,100
<b>Australian Capital Territory.</b>						
Canberra	..	..	..	..	..	43,973

(a) Metropolitan Area.

## CHAPTER X.—VITAL STATISTICS.

## § 2. Marriages.

**Age and Conjugal Condition at Marriage, p. 325.**—A summary of the previous conjugal condition of bridegrooms and brides in 1958 in relation to age at marriage is as follows.

AGE AND CONJUGAL CONDITION OF BRIDEGROOMS AND BRIDES:  
AUSTRALIA, 1958.

Age at Marriage (Years).	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
Under 20	3,356	1	..	3,357	18,546	3	5	18,554
20-24	31,566	6	50	31,622	33,563	78	262	33,903
25-29	19,274	64	435	19,773	8,093	211	912	9,216
30-34	7,387	143	965	8,495	2,922	288	1,138	4,348
35-39	2,625	183	858	3,666	1,308	376	1,009	2,693
40-44	1,131	267	737	2,135	585	418	678	1,681
45-49	633	340	535	1,508	420	469	474	1,363
50-54	309	412	351	1,072	218	358	227	803
55-59	178	393	219	790	143	305	89	537
60-64	111	402	96	609	87	304	60	451
65 and over	87	824	63	974	71	356	25	452
<b>Total</b>	<b>66,657</b>	<b>3,035</b>	<b>4,309</b>	<b>74,001</b>	<b>65,956</b>	<b>3,166</b>	<b>4,879</b>	<b>74,001</b>

In 1958 the proportional distribution (per cent.) of bridegrooms and brides according to previous conjugal condition was:—

Bridegrooms: Bachelors, 90.08; Widowers, 4.10; Divorced, 5.82.  
Brides: Spinsters, 89.13; Widows, 4.28; Divorced, 6.59.

In 1958 the average age of bridegrooms was 28.36 years and of brides 25.00 years.

Celebration of Marriages, p. 327.—The number of marriages in 1958 celebrated by ministers of religion in the various denominations or by civil officers was as follows:—

## MARRIAGES IN EACH DENOMINATION, 1958.

Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia.	
									No.	Proportion of Total.
Church of England	8,980	4,788	2,781	1,332	1,481	929	24	109	20,424	27.60
Roman Catholic ..	7,595	5,588	2,735	1,281	1,260	521	76	87	19,143	25.87
Methodist ..	2,683	2,522	1,633	1,485	623	366	7	16	9,335	12.61
Presbyterian ..	3,014	3,346	1,784	299	330	124	21	31	8,949	12.09
Greek Orthodox ..	785	1,041	119	348	71	7	6	..	2,377	3.21
Baptist ..	415	267	166	156	71	55	1	4	1,135	1.53
Lutheran ..	133	256	253	357	18	6	10	5	1,038	1.40
Congregational ..	275	257	96	224	101	38	..	..	991	1.34
Church of Christ ..	70	356	69	177	91	16	..	3	782	1.06
Salvation Army ..	122	100	112	49	35	23	8	..	449	0.61
Seventh-Day Adventist ..	75	40	38	13	26	5	..	..	197	0.27
Unitarian ..	..	27	..	3	..	..	..	..	30	0.04
Other Christian ..	150	134	143	41	128	24	27	..	647	0.88
Hebrew ..	118	151	7	2	14	..	..	..	292	0.39
Other Non-Christian ..	..	..	..	1	..	..	..	..	1	..
Total ..	24,415	18,873	9,936	5,768	4,249	2,114	180	255	65,790	88.90
Civil Officers ..	4,139	1,776	319	737	789	361	21	69	8,211	11.10
Grand Total ..	28,554	20,649	10,255	6,505	5,038	2,475	201	324	74,001	100.00

PROPORTION OF TOTAL.  
(Per cent.)

Denominational ..	85.50	91.40	96.89	88.67	84.34	85.42	89.55	78.70	88.90
Civil ..	14.50	8.60	3.11	11.33	15.66	14.58	10.45	21.30	11.10

## § 4. Fertility and Reproduction.

Number of Live Births and Confinements, p. 328.—A summary of live births and confinements registered in 1958 is shown in the following table. The table also shows the confinements resulting in one or more live births. The figures exclude cases where the births were of still-born children only.

## LIVE BIRTHS AND CONFINEMENTS, 1958.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
LIVE BIRTHS.									
Single Births ..	78,246	59,731	33,130	19,555	16,338	8,370	685	1,243	217,298
Twins ..	1,764	1,512	727	480	390	198	12	29	5,112
Triplets ..	35	26	15	12	3	..	..	3	94
Males ..	40,809	31,517	17,443	10,181	8,532	4,449	347	679	113,957
Females ..	39,236	29,752	16,429	9,866	8,199	4,119	350	596	108,547
Total ..	80,045	61,269	33,872	20,047	16,731	8,568	697	1,275	222,504

LIVE BIRTHS AND CONFINEMENTS, 1958—*continued.*

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
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## STILLBIRTHS ASSOCIATED WITH MULTIPLE BIRTHS INCLUDED ABOVE.

Twins .. .. .	42	6	15	4	16	2	..	1	86
Triplets .. .. .	1	1	..	..	..	..	..	..	2

## CONFINEMENTS RESULTING IN ABOVE BIRTHS.

Nuptial .. .. .	75,370	58,309	31,532	19,072	15,695	8,099	593	1,238	209,908
Ex-nuptial .. .. .	3,791	2,190	1,974	729	847	371	98	21	10,021
<b>Total .. .. .</b>	<b>79,161</b>	<b>60,499</b>	<b>33,506</b>	<b>19,801</b>	<b>16,542</b>	<b>8,470</b>	<b>691</b>	<b>1,259</b>	<b>219,929</b>

**Ex-nuptial Live Births, p. 338.**—The following table shows the number of ex-nuptial live births and the proportion of total live births in each State and Territory in 1958:—

## EX-NUPTIAL LIVE BIRTHS: NUMBER AND PROPORTION, 1958.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Number .. .. .	3,832	2,219	1,993	738	854	375	99	21	10,131
Proportion of Total Births Per cent. .. .. .	4.79	3.62	5.88	3.68	5.10	4.38	14.20	1.65	4.55

## § 5. Mortality.

**Age Distribution, p. 354.**—A summary of the ages at death for Australia for the year 1958 is given in the following table:—

## AGE AT DEATH: AUSTRALIA, 1958.

Age at Death.	Males.	Fe- males.	Per- sons.	Age at Death.	Males.	Fe- males.	Per- sons.
Under 1 week .. .. .	1,586	1,223	2,809	5- 9 years .. .. .	292	185	477
1 week and under 2 weeks .. .. .	121	105	226	10-14 .. .. .	225	155	380
2 weeks .. .. .	60	47	107	15-19 .. .. .	461	162	623
3 .. .. .	55	29	84	20-24 .. .. .	627	181	808
				25-29 .. .. .	547	214	761
<b>Total under 28 days .. .. .</b>	<b>1,822</b>	<b>1,404</b>	<b>3,226</b>	30-34 .. .. .	666	347	1,013
				35-39 .. .. .	841	540	1,381
				40-44 .. .. .	1,114	782	1,896
				45-49 .. .. .	1,901	1,097	2,998
28 days and under 3 months .. .. .	237	164	401	50-54 .. .. .	2,677	1,433	4,110
3 months and under 6 .. .. .	275	179	454	55-59 .. .. .	3,580	1,860	5,440
6 .. .. .	255	224	479	60-64 .. .. .	4,643	2,766	7,409
				65-69 .. .. .	6,231	3,905	10,136
<b>Total under 1 year .. .. .</b>	<b>2,589</b>	<b>1,971</b>	<b>4,560</b>	70-74 .. .. .	6,597	5,066	11,663
				75-79 .. .. .	5,787	5,502	11,289
				80-84 .. .. .	4,149	4,910	9,059
				85-89 .. .. .	2,476	3,449	5,925
				90-94 .. .. .	881	1,391	2,272
1 year .. .. .	234	174	408	95-99 .. .. .	176	306	482
2 years .. .. .	165	127	292	100 and over .. .. .	11	20	31
3 .. .. .	86	60	146	Age not stated .. .. .	22	6	28
4 .. .. .	72	64	136				
<b>Total under 5 years .. .. .</b>	<b>3,146</b>	<b>2,396</b>	<b>5,542</b>	<b>Total, All Ages .. .. .</b>	<b>47,050</b>	<b>36,673</b>	<b>83,723</b>

Causes of Death, p. 357.—The following table shows deaths of males, females and persons registered in 1958, classified according to the Abbreviated List of 50 Causes provided in the Seventh Revision of the International List:—

## CAUSES OF DEATH: AUSTRALIA, 1958.

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SEVENTH REVISION, 1955, OF THE INTERNATIONAL LIST).

Cause of Death.	Detailed List Numbers.	Males.	Females.	Persons.
B 1 Tuberculosis of respiratory system .. .. .	001-008	382	119	501
B 2 Tuberculosis, other forms .. .. .	010-019	23	14	37
B 3 Syphilis and its sequelae .. .. .	020-029	101	27	128
B 4 Typhoid fever .. .. .	040	3	2	5
B 5 Cholera .. .. .	043	..	..	..
B 6 Dysentery, all forms .. .. .	045-048	10	5	15
B 7 Scarlet fever and streptococcal sore throat	050, 051	..	..	..
B 8 Diphtheria .. .. .	055	..	1	1
B 9 Whooping cough .. .. .	056	2	1	3
B10 Meningococcal infections .. .. .	057	22	13	35
B11 Plague .. .. .	058	..	..	..
B12 Acute poliomyelitis .. .. .	080	2	2	4
B13 Smallpox .. .. .	084	..	..	..
B14 Measles .. .. .	085	10	4	14
B15 Typhus and other rickettsial diseases ..	100-108	..	..	..
B16 Malaria .. .. .	110-117	..	..	..
B17 All other diseases classified as infective and parasitic .. .. .	(a)	184	143	327
B18 Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues ..	140-205	6,833	5,814	12,647
B19 Benign and unspecified neoplasms .. .. .	210-239	115	132	247
B20 Diabetes mellitus .. .. .	260	404	711	1,115
B21 Anaemias .. .. .	290-293	96	171	267
B22 Vascular lesions affecting central nervous system	330-334	4,963	6,397	11,360
B23 Non-meningococcal meningitis .. .. .	340	61	44	105
B24 Rheumatic fever .. .. .	400-402	30	18	38
B25 Chronic rheumatic heart disease .. .. .	410-416	330	347	677
B26 Arteriosclerotic and degenerative heart disease	420-422	14,206	9,194	23,400
B27 Other diseases of heart .. .. .	430-434	1,441	1,252	2,693
B28 Hypertension with heart disease .. .. .	440-443	820	1,114	1,934
B29 Hypertension without mention of heart ..	444-447	548	524	1,072
B30 Influenza .. .. .	480-483	69	34	103
B31 Pneumonia .. .. .	490-493	1,616	1,255	2,871
B32 Bronchitis .. .. .	500-502	807	224	1,031
B33 Ulcer of stomach and duodenum .. .. .	540, 541	498	177	675
B34 Appendicitis .. .. .	550-553	74	53	127
B35 Intestinal obstruction and hernia .. .. .	560, 561, 570	287	249	536
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn .. .. .	543, 571, 572	246	237	483
B37 Cirrhosis of liver .. .. .	581	328	168	496
B38 Nephritis and nephrosis .. .. .	590-594	655	495	1,150
B39 Hyperplasia of prostate .. .. .	610	513	..	513
B40 Complications of pregnancy, childbirth and the puerperium .. .. .	640-652, 660	..	111	111
B41 Congenital malformations .. .. .	670-689	630	507	1,137
B42 Birth injuries, post-natal asphyxia and atelectasis .. .. .	750-759	..	..	..
B43 Infections of the newborn .. .. .	760-762	672	479	1,151
B44 Other diseases peculiar to early infancy, and immaturity unqualified .. .. .	763-768	96	80	176
B45 Senility without mention of psychosis, ill-defined and unknown causes .. .. .	769-776	708	575	1,283
B46 All other diseases .. .. .	780-795	476	564	1,040
BE47 Motor vehicle accidents .. .. .	Residual	4,152	3,624	7,776
BE48 All other accidents .. .. .	E810-E835	1,824	507	2,331
BE49 Suicide and self-inflicted injury .. .. .	E800-E802	1,819	925	2,744
BE50 Homicide and operations of war .. .. .	E840-E962	..	..	..
	E963	..	..	..
	E970-E979	910	297	1,207
	E964, E965	..	..	..
	E980-E999	94	63	157
All Causes .. .. .		47,050	36,673	83,723

(a) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

## CHAPTER XI.—HOUSING.

## § 3. Statistical Summary—New Building.

New Houses, p. 377.—The number of new houses commenced, completed and under construction in each State and Territory during 1958 was as follows:—

NEW HOUSES : NUMBER, 1958.  
(Including Owner-built Houses.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.(a)	A.C.T.	Aust.
Commenced ..	25,366	23,164	7,449	7,141	5,123	2,447	347	1,078	72,115
Completed ..	27,223	23,447	7,630	7,705	5,743	2,366	309	1,020	75,443
Under construction at 31st December, 1958 ..	16,505	17,255	2,947	4,931	3,472	2,072	165	879	48,226

(a) Includes flats.

Of the 75,443 new houses completed during 1958, 27,776 had outer walls of brick, brick veneer, concrete or stone, 28,389 of wood (weatherboard, etc.), 18,615 of fibro-cement and 663 of other materials.

New Flats, p. 379.—The following table shows the number of new flats commenced, completed and under construction in each State and the Australian Capital Territory during 1958:—

NEW FLATS : NUMBER, 1958.  
(Individual Flats.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	A.C.T.	Aust.(a)
Commenced ..	2,291	1,373	663	769	133	218	196	5,643
Completed ..	1,680	1,266	439	562	238	79	220	4,484
Under construction at 31st December, 1958 ..	1,519	876	359	432	71	163	452	3,872

(a) Excludes figures for the Northern Territory, which are not available for publication.

Value of New Buildings, p. 380.—The values of all new buildings commenced, completed and under construction in each State and Territory are shown in the following table for the year 1958:—

NEW BUILDINGS : VALUE, 1958.  
(Including Estimated Value of Owner-built Houses.)  
(£'000.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Commenced ..	145,476	133,125	37,190	39,444	25,123	13,769	2,564	8,365	405,056
Completed ..	166,328	136,982	41,375	42,644	30,448	12,559	2,200	8,596	441,132
Under construction at 31st December, 1958 ..	112,353	118,135	26,910	32,823	20,754	12,651	1,830	13,304	338,760

The value of new buildings completed in Australia during 1958, according to kind of building, was as follows:—*Houses*—Brick, brick veneer, concrete and stone, £106,414,000; wood (weatherboard, etc.), £84,518,000; fibro-cement, £45,785,000; other, £1,963,000; Total, £238,680,000; *Other Buildings*—Flats, £11,978,000; hotels, guest-houses, etc., £7,700,000; shops, £14,743,000; factories, £49,250,000; business premises—office, £30,423,000; other, £19,131,000; educational, £19,973,000; religious, £5,090,000; health £25,789,000; entertainment and recreation, £8,691,000; miscellaneous, £9,684,000, Total, £202,452,000; Grand Total, New Buildings, £441,132,000.

Persons Engaged in New Building, p. 381.—The number of tradesmen engaged on jobs carried out by builders of new buildings in Australia at 17th December, 1958 was as follows:—Carpenters, 44,994, bricklayers, 11,061; painters, 10,684; electricians, 5,876; plumbers, 9,684; builders' labourers, 18,163; other, 15,439; total, 115,901. Contractors actually working on jobs numbered 9,719, sub-contractors actually working on jobs 16,200 and wage earners 89,982.

## CHAPTER XII.—LABOUR, WAGES AND PRICES.

### A. RETAIL PRICES AND PRICE INDEXES.

#### § 4. Tabular Statements of Retail Price Index Numbers.

The Interim Retail Price Index, pp. 400-1.—The following table shows the Interim Retail Price Index numbers for the March and June quarters, 1959, for each capital city and for the six capital cities combined, showing separate series for each of the four main groups of items:—

#### INTERIM RETAIL PRICE INDEX NUMBERS.

(Base of each Index: Year 1952-53=100.)

Period.	Sydney.	Mel- bourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Six Capitals. (a)
GROUP I.—FOOD (EXCLUDING POTATOES AND ONIONS). (b)							
March Qtr., 1959 ..	114.2	116.7	119.6	118.4	115.6	116.3	116.1
June " " ..	114.9	118.7	120.2	120.7	117.9	116.7	117.4
GROUP I.—FOOD (INCLUDING POTATOES AND ONIONS).							
March Qtr., 1959 ..	114.3	118.0	120.9	119.1	116.1	117.5	116.7
June " " ..	114.6	119.4	120.6	120.5	118.5	117.1	117.6
GROUP II.—CLOTHING AND DRAPERY.							
March Qtr., 1959 ..	109.8	111.4	110.7	107.6	110.3	112.2	110.3
June " " ..	110.3	111.8	111.5	107.8	110.6	112.1	110.7
GROUP III.—RENT (c) (4 AND 5 ROOMED HOUSES).							
March Qtr., 1959 ..	125.5	134.8	142.2	145.7	184.5	173.8	137.4
June " " ..	126.4	136.3	144.8	146.2	185.4	175.7	138.6
GROUP IV.—OTHER ITEMS. (d).							
March Qtr., 1959 ..	125.7	127.8	125.8	113.3	117.1	125.3	124.7
June " " ..	126.3	128.3	126.2	113.5	117.3	125.8	125.2
ALL GROUPS (EXCLUDING POTATOES AND ONIONS). (b).							
March Qtr., 1959 ..	117.3	119.9	120.7	116.6	121.6	123.0	118.8
June " " ..	117.9	121.0	121.4	117.6	122.7	123.4	119.7
ALL GROUPS (INCLUDING POTATOES AND ONIONS).							
March Qtr., 1959 ..	117.3	120.3	121.1	116.8	121.7	123.4	119.0
June " " ..	117.8	121.3	121.5	117.5	122.9	123.5	119.7

(a) Weighted average. (b) See para. 5 on page 399. (c) The rent index numbers measure the proportionate rise and fall in the average weekly rentals paid for houses of four and five rooms taking corresponding houses throughout. See note (c) on page 401. (d) A group of items under the following headings—Electricity, Gas, and Firewood; Household Sundries; Services; Cinema Admission, Radio Licence, and Newspapers; Fares; and Tobacco and Cigarettes.

### § 5. The "C" Series Retail Price Index.

"C" Series Retail Price Index, Six Capital Cities, p. 407.—The following table shows "C" Series retail price index numbers for the March and June quarters, 1959, for the six capital cities combined:—

#### "C" SERIES RETAIL PRICE INDEX NUMBERS: SIX CAPITAL CITIES COMBINED.

(Base of each Group: Weighted Average of Six Capital Cities, 1923-27 = 1,000.)

Period.	Food and Groceries. (a)		Rent (4 and 5 Roomed Houses). (b)	Clothing.	Miscel- laneous.	Total "C" Series Index.(a)	
	A	B				A	B
March Qtr., 1959 ..	3,057	3,067	1,510	3,420	2,474	2,660	2,663
June " " ..	3,096	3,086	1,524	3,440	2,473	2,681	2,677

(a) Indexes in columns A exclude, and those in columns B include, the price movement of potatoes and onions. (b) See note (c) on p. 401.

### B. WHOLESALE PRICES AND PRICE INDEXES.

#### § 2. Wholesale Price (Basic Materials and Foodstuffs) Index.

Index Numbers, p. 410.—Index numbers for each group of commodities and for all groups combined for the index of wholesale prices of basic materials and foodstuffs are shown below for the months January to June, 1959.

#### WHOLESALE PRICE (BASIC MATERIALS AND FOODSTUFFS) INDEX NUMBERS

(Base of each Group: Average, 3 years ended June, 1939 = 100.)

Month.	Basic Materials.						Total.	Food- stuffs and To- bacco. (b)	Basic Materials and Foodstuffs.		
	Metals and Coal.	Oils, Fats and Waxes.	Tex- tiles.	Chem- icals.	Rubber and Hides.	Build- ing Ma- terials.			Goods princi- pally Im- ported. (a)	Goods princi- pally Home- pro- duced. (b)	Total All Groups. (b)
1959—											
Jan.	391	231	333	327	263	422	336	320	280	347	327
Feb.	392	231	346	327	284	422	338	328	281	354	332
Mar.	390	232	353	327	326	422	340	341	282	365	340
Apr.	390	232	398	327	410	422	346	340	282	368	343
May	387	232	402	327	371	422	344	336	284	363	340
June	388	232	392	327	361	422	343	338	284	364	340

(a) Represents only such imported commodities as are included in the Wholesale Price Index and does not measure changes in price of all imports. (b) The indexes for "Foodstuffs and Tobacco", "Goods Principally Home-produced" and "Total All Groups" have been reconstructed as from the base period by excluding potatoes and onions.

### D. WAGES.

#### § 2. Rates of Wage and Hours of Labour.

Weekly Rates of Wage, pp. 415-6.—The following table shows for each State and Australia the weighted average nominal weekly rates of wage payable, and the index numbers based thereon, for adult males and for adult females, at 31st March and 30th June, 1959.

## WEEKLY WAGE RATES OF ADULT MALES AND FEMALES.

(WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK  
(EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES.)

Date.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust. (a)
-------	--------	------	---------	----------	----------	------	--------------

## ADULT MALES—RATES OF WAGE.

	s.	d.								
31st March, 1959 ..	339	0	322	3	321	7	315	6	328	10
30th June, 1959 ..	345	4	329	8	328	0	330	10	332	4
									332	2
									343	7
									328	11
									336	3

## ADULT MALES—INDEX NUMBERS.

(Base: Weighted Average Wage for Australia (51s. 3d.), 1911 = 1,000.)

31st March, 1959 ..	6,615	6,288	6,275	6,156	6,416	6,482	6,419
30th June, 1959 ..	6,739	6,433	6,400	6,456	6,485	6,704	6,560

## ADULT FEMALES—RATES OF WAGE.

	s.	d.								
31st March, 1959 ..	231	5	225	0	217	5	221	8	212	11
30th June, 1959 ..	238	0	232	9	224	4	233	0	219	2
									227	10
									233	0

## ADULT FEMALES—INDEX NUMBERS.

(Base: Weighted Average for Australia (27s. 2d.), 30th April, 1914 = 1,000.)

31st March, 1959 ..	8,519	8,282	8,003	8,160	7,837	8,033	8,299
30th June, 1959 ..	8,761	8,566	8,256	8,574	8,066	8,386	8,574

(a) Weighted average for Australia.

## § 4. Basic Wages in Australia.

**Basic Wage Inquiry, 1959.**—The inquiry was originated by summons on behalf of several organizations of employees for the undermentioned variations of the current Metal Trades Award of the Commonwealth Conciliation and Arbitration Commission; namely, by increasing the amounts of basic wage prescribed therein for respective cities, towns and localities to the figure each would have reached had the quarterly adjustment system based on the "C" Series retail price index numbers been retained, plus an addition of 10s. to each basic wage, and by making provision for future adjustment of each of the new amounts at quarterly intervals by the application thereto of the same index numbers.

The inquiry opened on 24th February, 1959, before Kirby C.J., Foster and Gallagher J.J., and the judgment was delivered on 5th June, 1959.

The following is an extract from a statement made by Kirby C.J., on 5th June, 1959, on behalf of the three members of the bench.

"The questions for decision by the Commission may be described in these terms:—

1. Should the basic wage in the Pastoral Award 1956 be reduced by 25s. or at all?
2. Should the system of automatic quarterly adjustments be restored?
3. Should there be an increase in the basic wage?
4. If so, of what amount?

On the first question, namely, whether the basic wage in the Pastoral Award 1956, should be reduced, the Commission was unanimous that the claim for a reduction should be refused. On the second question, namely, whether the system of automatic quarterly adjustments should be restored, the members of the Commission were divided in opinion and therefore the question pursuant to section 68 has been decided according to the decision of the majority.

The majority decision on this question, namely, that of the President and Mr. Justice Gallagher is that the claim of the unions for restoration of the said system should be refused. Mr. Justice Foster dissents. The result is that the said system will not be restored.

On the third question, namely, whether there should be an increase in the basic wage, the members of the Commission were unanimous in the opinion that there should be an increase.

On the fourth question, namely, the amount of the increase, the members of the Commission were divided in opinion in this manner:—

The President Mr. Justice Kirby was of opinion that the increase should be one of 15s. added to each basic wage for adult males in the awards concerned and that the increased basic wage should become payable as from the beginning of the first pay period commencing on or after 11th June, 1959.

Mr. Justice Foster was of opinion that the increase should be 20s. payable as to 10s. as from the first pay period in July, 1959 and as to the balance by increases of 2s. 6d. for four quarters commencing 1st January, 1960.

Mr. Justice Gallagher was of opinion that the increase should be one of 10s. and that the increased wage should become payable as from the date chosen by the President.

Mr. Justice Foster while holding his opinion has decided to concur in the decision proposed by the President, namely, that the amount of the increase of the basic wage should be 15s. per week, which now therefore becomes the decision of the Commission.

Summarizing the foregoing the decisions of the Commission are:—

1. The claim for a reduction of the basic wage in the Pastoral Award is refused.
2. The claim for restoration of automatic quarterly adjustments is refused.
3. The basic wages of adult male employees covered by federal awards will be increased by a uniform amount of 15s. per week.
4. The new rates will come into effect from the beginning of the first pay-period commencing on or after 11th June instant subject to special cases.

The decision regarding basic wages is applicable to all the applications which from time to time have been ordered by the Commission to be joined for hearing and decision with the original application.

In the Metal Trades Award and in awards generally the basic wage for adult females is prescribed at 75 per cent. of the basic wage for adult males. The result of the increase of the basic wage for adult males by 15s. per week will be to increase the basic wage for adult females in these awards to 75 per cent. of the new basic wage for adult males.

In those awards which do not contain such a provision but which prescribe basic wages for adult females of a stated amount equal to 75 per cent. of that for adult males the rate will be re-calculated to give effect to this decision.

In the Metal Trades and in many other awards the rates for juniors and apprentices of both sexes are prescribed at a percentage of the basic wage for adults in which cases the existing provisions of the awards will cover proportionate increases for such juniors and apprentices. In awards which do not contain such provisions applications may be made to the Commission and will be dealt with by the appropriate member of the Commission."

The new basic wage rates of the Commonwealth Conciliation and Arbitration Commission for adult males payable in the capital city of each State from the beginning of the first pay period commencing on or after 11th June, 1959, are as follows:—Sydney, £14 3s., Melbourne, £13 15s., Brisbane £12 18s., Adelaide £13 11s., Perth, £13 16s., Hobart, £14 2s., Six Capital Cities (weighted average) £13 16s.

State Basic Wage Rates, p. 439.—The table below shows the "basic" weekly wage rates of State industrial tribunals, operative in May and August, 1959.

## STATE BASIC WAGE—WEEKLY RATES.

State.	May, 1959.			August, 1959.		
	Date of Operation (a)	Males.	Females.	Date of Operation (a)	Males.	Females.
		s. d.	s. d.		s. d.	s. d.
New South Wales—						
Metropolitan and Country, excluding Broken Hill ..	May, 1959	276 0	207 0	Aug., 1959	277 0	207 6
Broken Hill .. .. .	May, 1959	276 0	207 0	Aug., 1959	275 0	206 0
Victoria(b) .. .. .	Aug., 1956	263 0	197 0	(c)	275 0	206 0
Queensland—						
Southern Division (Eastern District), including Brisbane	27.4.59	263 0	179 0	27.4.59	263 0	179 0
Southern Division (Western District) .. .. .	27.4.59	273 6	184 3	27.4.59	273 6	184 3
Mackay Division .. .. .	27.4.59	272 0	183 6	27.4.59	272 0	183 6
Northern Division (Eastern District) .. .. .	27.4.59	273 6	184 3	27.4.59	273 6	184 3
Northern Division (Western District) .. .. .	27.4.59	295 6	195 3	27.4.59	295 6	195 3
South Australia(d) .. .. .	26.5.58	256 0	192 0	15.6.59	271 0	203 0
Western Australia—						
Metropolitan Area .. .. .	27.4.59	275 1	178 10	27.7.59	278 7	181 1
South-West Land Division ..	27.4.59	274 6	178 5	27.7.59	277 5	180 4
Goldfields and other areas ..	27.10.58	271 6	176 6	27.7.59	273 6	177 9
Tasmania(b) .. .. .	Aug., 1956	272 0	204 0	eJuly, 1959	282 0	211 6

(a) Where dates are not quoted wage rates operate from the beginning of the first pay-period commencing in the month shown. (b) No basic wage declared. Rates shown are those adopted by most Wages Boards. (c) During June and July, 1959, Wages Boards varied determinations by adopting the Commonwealth basic wage rate. (d) The "living wage" declared for the metropolitan area is also adopted for country areas, except at Whyalla where a loading of 5s. a week is generally payable. (e) Wages Boards adopted the Commonwealth basic wage rate from July, 1959.

## E. EMPLOYMENT AND UNEMPLOYMENT.

## § 1. Employment.

Wage and Salary Earners in Civilian Employment, pp. 442-4.—The following are particulars of wage and salary earners in civilian employment, excluding rural wage earners, female private domestics, defence forces and national service trainees in camp, for the month of June, 1959.

## WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT, JUNE, 1959.

(Excluding Rural Wage Earners, Female Private Domestics, Defence Forces and National Service Trainees in Camp.)  
(‘000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(a)
Males .. .. .	820.0	601.6	286.5	191.1	139.5	67.0	2,121.9
Females .. .. .	320.4	251.9	98.0	65.5	46.8	23.3	811.1
Persons .. .. .	1,140.4	853.5	384.5	256.6	186.3	90.3	2,933.0

Particulars.	Governmental. (b)	Private Employers.	Mining and Quarrying.	Manufacturing, etc. (c)	Transport and Communication.	Retail Trade.	Other Commerce and Finance.
Males .. .. .	633.9	1,488.0	49.1	868.5	312.6	133.3	221.5
Females .. .. .	143.9	667.2	1.1	255.3	40.3	126.3	95.3
Persons .. .. .	777.8	2,155.2	50.2	1,123.8	352.9	259.6	316.8

(a) Includes the Australian Capital Territory and the Northern Territory. (b) Includes all employees of Government authorities (Commonwealth, State, Local and Semi-Governmental) on services such as railways, tramways, banks, post offices, air transport, education, broadcasting, television, police, public works, factories and munitions establishments, migrant hostels, etc., as well as administrative employees, within Australia. (c) Subject to revision. See note (a), p. 444.

Government Employees, p. 446.—The number of Government employees in Australia in June, 1959, was as follows:—Commonwealth Government—males, 172,724; females, 46,810; persons, 219,534; State Government and Semi-Government authorities—males, 391,274; females, 90,117; persons, 481,391; Local Government authorities—males, 69,848; females, 7,008; persons, 76,856; Total—males, 633,846; females, 143,935; persons, 777,781.

## CHAPTER XIII.—TRADE.

NOTE.—Values are expressed in £A. f.o.b., port of shipment.

## § 6. Total Oversea Trade.

Summary of Movements, p. 470.—The following are preliminary figures of the total overseas trade of Australia during the year 1958–59:—Merchandise—Exports, £808,510,549; Imports, £794,469,717; Commodity balance, +£14,040,832; Bullion and Specie—Exports, £4,757,698; Imports, £2,210,821; Balance, +£2,546,877; Total balance, +£16,587,709.

## § 7. Direction of Oversea Trade.

According to Countries, p. 475.—The following table shows particulars of the values of total imports and total exports of Australia, including bullion and specie, according to countries of origin or consignment, for the year 1958–59.

**TOTAL OVERSEA TRADE, AUSTRALIA: COUNTRIES OF ORIGIN OR  
CONSIGNMENT, 1958-59.(a)**  
(£'000.)

Country.	Imports.	Exports.	Country.	Imports.	Exports.
United Kingdom .. .. .	307,477	255,481	Belgium-Luxemburg .. .. .	6,751	23,602
Australian Territories—			China (Mainland) .. .. .	3,574	13,690
New Guinea .. .. .	6,695	10,572	Czechoslovakia .. .. .	2,210	5,778
Papua .. .. .	1,087	4,145	France .. .. .	11,729	46,605
Borneo (British) .. .. .	13,028	1,286	Germany, Federal Republic .. .. .	42,957	27,341
Canada .. .. .	23,109	16,463	Indonesia .. .. .	31,452	2,138
Ceylon .. .. .	10,458	5,899	Iran .. .. .	20,556	753
Fiji .. .. .	1,414	5,588	Italy .. .. .	9,720	32,249
Hong Kong .. .. .	3,963	11,982	Japan .. .. .	29,917	102,306
India .. .. .	20,995	10,081	Mexico .. .. .	2,668	4,347
Malaya, Federation of .. .. .	11,480	13,868	Netherlands .. .. .	12,963	6,613
New Zealand .. .. .	12,481	49,597	Norway .. .. .	3,468	478
Pakistan .. .. .	2,094	1,532	Poland .. .. .	192	10,988
Singapore .. .. .	1,332	10,166	Sweden .. .. .	12,229	2,677
South Africa, Union of .. .. .	5,290	5,766	Switzerland .. .. .	17,382	1,405
Other Commonwealth Countries	18,610	22,848	United States of America .. .. .	108,519	60,773
<i>Total, Commonwealth Countries</i>	<i>439,513</i>	<i>425,274</i>	Other Foreign Countries(b) .. .. .	15,882	41,990
Arabian States .. .. .	29,465	2,866	<i>Total, Foreign Countries</i>	<i>357,168</i>	<i>387,994</i>
Austria .. .. .	2,534	1,395	<i>Total, All Countries</i> .. .. .	<i>796,681</i>	<i>813,268</i>

(a) Preliminary.

(b) Includes shipments made "for orders" and imports of unknown origin.

According to Monetary Areas, p. 477.—The following table shows the trade of Australia during 1958–59 according to monetary areas.

**OVERSEA TRADE OF AUSTRALIA ACCORDING TO MONETARY AREAS(a),  
1958-59.(b)**

Monetary Area.	£'000.	Monetary Area.	£'000.
STERLING.		OTHER NON-STERLING.	
Imports—		Imports—	
From—United Kingdom .. .. .	307,477	From—Countries of the O.E.E.C., including dependencies .. .. .	118,122
Other Sterling Area Countries .. .. .	134,069	Other Countries .. .. .	100,754
Total .. .. .	441,546	Total .. .. .	218,876
Exports—		Exports—	
To—United Kingdom .. .. .	255,481	To—Countries of the O.E.E.C., in- cluding dependencies .. .. .	153,582
Other Sterling Area Countries .. .. .	156,783	Other Countries .. .. .	159,479
Total .. .. .	412,264	Total .. .. .	313,061
Excess of Exports (+) or Imports (–) .. .. .	– 29,282	Excess of Exports (+) or Imports (–) .. .. .	+ 94,185
DOLLAR.		ALL MONETARY AREAS.	
Imports—		Total Imports .. .. .	796,681
From—United States of America .. .. .	108,519	Total Exports .. .. .	813,268
Canada .. .. .	23,109	Excess of Exports (+) or Imports (–) .. .. .	+ 16,587
Other Dollar Area Countries .. .. .	4,631		
Total .. .. .	136,259		
Exports—			
To—United States of America .. .. .	60,773		
Canada .. .. .	16,463		
Other Dollar Area Countries .. .. .	10,707		
Total .. .. .	87,943		
Excess of Exports (+) or Imports (–) .. .. .	– 48,316		

(a) For a list of the countries in each monetary area, see page 476. (b) Preliminary.

### § 11. Classified Summary of Australian Oversea Trade

Imports and Exports in Statistical Classes, p. 482.—The following table shows the values of total imports and total exports in statistical classes for the year 1958-59:—

#### TOTAL OVERSEA TRADE, AUSTRALIA : CLASSES, 1958-59.(a) (£'000.)

Class.	Imports.	Exports.	Class.	Imports.	Exports.
I. Animal foodstuffs, etc. . . . .	7,702	147,939	XIII. Rubber and leather, etc. . . . .	17,676	4,599
II. Vegetable foodstuffs; non-alcoholic beverages, etc. . . . .	27,979	156,037	XIV. Wood and wicker, etc. . . . .	15,485	4,345
III. Alcoholic liquors, etc. . . . .	2,290	2,085	XV. Earthenware, etc. . . . .	14,352	973
IV. Tobacco, etc. . . . .	14,516	452	XVI. Paper and stationery . . . . .	48,216	2,674
V. Live animals . . . . .	551	1,243	XVII. Jewellery, etc. . . . .	8,728	905
VI. Animal substances, etc. . . . .	3,866	327,275	XVIII. Optical, surgical and scientific instruments . . . . .	12,303	1,773
VII. Vegetable substances, etc. . . . .	19,789	994	XIX. Chemicals, medicinal products, fertilizers, etc. . . . .	39,911	7,474
VIII. Apparel, textiles, etc. . . . .	97,005	2,448	XX. Miscellaneous . . . . .	52,739	21,014
IX. Oils, fats and waxes . . . . .	104,600	22,547	XXI. Gold and silver; bronze specie . . . . .	2,211	4,758
X. Pigments, paints and varnishes . . . . .	6,767	922			
XI. Rocks, minerals, etc. . . . .	7,105	21,148			
XII. Metals, metal manufactures and machinery . . . . .	292,890	81,663	Total . . . . .	796,681	813,268

(a) Preliminary.

Exports of Principal Articles of Australian Produce, p. 484.—The following table shows the quantities and values of the principal articles of Australian produce exported during 1958-59:—

#### EXPORTS OF PRINCIPAL ARTICLES OF AUSTRALIAN PRODUCE, 1958-59.(a)

Article.	Unit of Quantity.	Quantity.	Value.(£'000.)
Arms, ammunition, military, naval and air force stores . . . . .	..	..	3,487
Barley . . . . .	ton	672,645	16,952
Butter . . . . .	"	76,326	24,953
Cheese . . . . .	"	14,438	4,466
Chemicals, drugs, fertilizers . . . . .	..	..	7,474
Flour (wheaten), plain white . . . . .	ton (b)	449,547	13,340
Fruit—			
Dried . . . . .	ton	75,808	12,752
Fresh, including frozen . . . . .	'000 bus.	6,555	9,391
Preserved in airtight containers . . . . .	ton	87,297	12,952
Gold . . . . .	'000 fine oz.	203,076	3,279
Hides and skins . . . . .	..	..	23,582
Lead, pig . . . . .	ton	143,529	12,543
Machines and machinery (except dynamo electrical) . . . . .	..	..	8,655
Meats preserved by cold process—			
Beef and veal . . . . .	ton	228,030	55,532
Lamb . . . . .	"	40,711	8,152
Mutton . . . . .	"	33,341	5,865
Pork . . . . .	"	841	276
Meats, tinned . . . . .	"	56,778	15,453
Milk and cream . . . . .	'000 lb.	148,895	10,422
Ores and concentrates . . . . .	ton	621,322	16,933
Sugar (from cane) . . . . .	"	803,550	32,160
Wheat . . . . .	"	1,468,495	38,671
Wool (c) . . . . .	'000 lb.	1,397,181	302,320
All other articles . . . . .	..	..	157,017
<b>Total Exports (Australian Produce)</b> . . . . .	..	..	<b>796,627</b>

(a) Preliminary.

(b) 2,000 lb.

(c) Quantity in terms of greasy wool

### § 15. Australian Index of Export Prices.

Monthly Index (Fixed Weights), p. 491.—The following are the export price index numbers for the months October, 1958 to June, 1959.

#### EXPORT PRICE INDEXES: AUSTRALIA.

##### SIMPLE AGGREGATIVE INDEX: FIXED WEIGHTS.

##### INDIVIDUAL COMMODITIES, GROUPS OF COMMODITIES, AND ALL GROUPS COMBINED.

(Base of each Index: Average of three years ended June, 1939 = 100.)

Month.	Wool.	Wheat.	Butter.	Metals (a)	Meats (b)	Sugar.	Dried Fruits. (c)	Tallow.	Hides. (d)	Gold.	All Groups.	
											Ex- clud- ing Gold.	In- clud- ing Gold.
1958—												
October ..	336	363	195	391	(e)	473	385	382	270	178	fg 337	fg 326
November ..	339	355	222	404	(e)	477	390	378	273	178	fg 341	fg 330
December ..	328	353	242	389	(e)	470	391	375	285	178	fg 337	fg 326
1959—												
January ..	321	347	250	390	(e)	490	h 391	372	287	178	g 335	g 324
February ..	339	336	250	384	(e)	474	h 391	360	341	178	g 340	g 329
March ..	347	336	249	385	(e)	477	h 391	357	428	178	g 344	g 333
April ..	415	337	249	382	(e)	473	g 387	348	521	178	g 379	g 365
May ..	415	339	262	396	(e)	477	g 388	347	456	178	g 383	g 369
June ..	g 400	g 336	287	401	(e)	458	g 387	341	452	178	g 380	g 366

(a) Silver, copper, tin, zinc, lead. (b) Beef, lamb, mutton, pork. Guaranteed minimum prices are used when operative. (c) Sultanas, raisins, currants. (d) Cattle hides, calfskins. (e) Actual price realized not yet fully known; provisional series are included in "All Groups" indexes which are subject to revision. (f) Revised. (g) Preliminary. (h) Nominal.

### § 20. The Australian Balance of Payments.

The tables in this section show revised balance of payments estimates for the years 1955-56, 1956-57 and 1957-58 and preliminary estimates for 1958-59. In some cases the form of presentation is slightly different from that in Chapter XIII.—Trade. Further details of balance of payments estimates will be found in *The Australian Balance of Payments, 1928-29 to 1951-52* and in the mimeographed publication *The Australian Balance of Payments, 1954-55 to 1958-59*.

Current Account, p. 497.—Revised estimates of the balance of payments on current account for the years 1955-56 to 1957-58 and preliminary estimates for 1958-59 are shown in the following table.

## BALANCE OF PAYMENTS ON CURRENT ACCOUNT: AUSTRALIA.

(£A. million.)

Particulars.	1955-56.	1956-57.	1957-58.	1958-59.(a)
<b>CREDITS.</b>				
1. Exports f.o.b. .. ..	772.3	977.7	811.5	809.3
2. Gold Production(b) .. ..	15.6	16.0	16.3	16.9
3. Transportation—				
Expenditure of Oversea ships .. ..	57.2	63.4	64.2	66.5
Other .. ..	6.6	8.1	7.3	7.6
	63.8	71.5	71.5	74.1
4. Travel .. ..	6.1	9.0	7.5	8.0
5. Income from Investment—				
Undistributed Income .. ..	2.9	3.3	4.3	4.0
Other .. ..	18.5	22.5	30.2	21.9
	21.4	25.8	34.5	25.9
6. Government .. ..	9.5	15.7	14.1	13.9
7. Miscellaneous .. ..	9.5	7.5	7.7	8.6
8. Donations, etc.—				
Immigrants' Funds, etc. .. ..	14.2	16.1	17.4	19.4
Other .. ..	5.2	6.3	7.3	6.3
	19.4	22.4	24.7	25.7
<i>Total Credits</i> .. ..	917.6	1,145.6	987.8	982.4
<b>DEBITS.</b>				
9. Imports f.o.b. .. ..	819.5	717.5	790.0	793.6
10. Transportation—				
Freight .. ..	102.0	108.0	119.0	113.0
Other (including Marine Insurance)(c) .. ..	18.0	14.6	15.0	15.3
	120.0	122.6	134.0	128.3
11. Travel .. ..	22.3	22.2	27.7	28.7
12. Income from Investment—				
Public Authority Interest .. ..	22.3	22.7	22.5	25.0
Portfolio Investment .. ..	6.0	8.0	6.7	8.0
Direct Investment .. ..	38.8	37.7	48.8	44.9
Undistributed Income .. ..	39.9	44.7	38.8	38.0
	107.0	113.1	116.8	115.9
13. Government—				
Defence .. ..	11.5	4.4	11.5	14.5
Papua and New Guinea .. ..	11.0	11.5	12.8	13.9
Other .. ..	13.3	12.4	13.7	14.6
	35.8	28.3	38.0	43.0
14. Miscellaneous .. ..	22.7	21.3	27.8	31.9
15. Donations, etc.—				
Personal .. ..	16.5	18.2	16.8	15.0
Colombo Plan, etc. .. ..	4.0	4.5	4.8	4.5
Other .. ..	7.8	8.5	8.9	8.8
	28.3	31.2	30.5	28.3
<i>Total Debits</i> .. ..	1,155.6	1,056.2	1,164.8	1,169.7
<b>Balance on Current Account</b> .. ..	-238.0	89.4	-177.0	-187.3

(a) Preliminary. (b) Includes gold sold on the premium market. (c) Total marine insurance premiums payable on Australian imports (whether payable in Australia or overseas) were £4.2 million in 1955-56, £3.7 million in 1956-57, £4.1 million in 1957-58, and £4.1 million in 1958-59.

Capital Account, p. 499.—The following table shows revised estimates of Australia's balance of payments on capital account for the years 1955-56 to 1957-58 and preliminary estimates for 1958-59.

**BALANCE OF PAYMENTS ON CAPITAL ACCOUNT: AUSTRALIA.**

(£A. million.)

Particulars.	1955-56.	1956-57.	1957-58.	1958-59.(a)
<b>CHANGE IN ASSETS.</b>				
1. Gold and Foreign Exchange .. ..	- 73.3	211.5	- 41.1	- 10.4
2. Subscriptions to I.M.F., and I.F.C. .. ..	..	1.0	..	44.6
3. Other Official Transactions .. ..	- 11.9	- 35.6	- 4.9	- 17.3
4. Marketing Authorities .. ..	9.3	- 4.4	- 2.1	6.1
5. Portfolio Investment .. ..	- 1.7	- 0.9	- 2.2	- 2.7
6. Direct Investment—				
Branches—Unremitted Profits .. ..	0.4	0.7	0.6	1.0
—Other .. ..	4.0	6.8	2.0	(b)
Subsidiaries—Undistributed Profits .. ..	2.5	2.6	3.7	3.0
—Other .. ..	1.6	0.8	1.4	(b)
<i>Total—Change in Assets</i> .. ..	- 69.1	182.5	- 42.6	24.3
<b>CHANGE IN LIABILITIES.</b>				
7. Official Loans—				
I.B.R.D. .. ..	18.0	3.1	13.2	2.2
Other Commonwealth .. ..	6.8	3.2	0.7	11.3
States .. ..	1.4	- 33.4	2.1	22.2
Other .. ..	- 0.3	- 3.3	- 3.6	- 0.2
Discounts and Bonuses .. ..	- 0.1	0.1	0.2	- 0.7
8. Other I.M.F. and I.B.R.D. .. ..	..	- 1.0	- 3.1	24.0
9. Australian Currency held by Foreign Banks .. ..	- 0.3	0.3	- 0.2	- 1.0
10. Portfolio Investment—				
Government Securities .. ..	- 4.0	- 1.4	- 2.1	(b)
Companies, etc. .. ..	7.2	11.1	14.2	(b)
11. Direct Investment—				
Branches—Unremitted Profits .. ..	6.6	7.5	2.1	2.0
—Other .. ..	12.5	8.3	5.3	(b)
Subsidiaries—Undistributed Profits .. ..	33.3	37.2	36.7	36.0
—Other .. ..	57.9	33.8	39.2	(b)
12. Life Assurance Offices .. ..	- 1.1	- 1.1	- 4.8	- 5.5
13. Balancing Item .. ..	31.0	28.7	34.5	121.3
<i>Total—Change in Liabilities</i> .. ..	168.9	93.1	134.4	211.6
<b>Balance on Capital Account</b> .. ..	<b>238.0</b>	<b>- 89.4</b>	<b>177.0</b>	<b>187.3</b>

(a) Preliminary. (b) Not available, included in balancing item.

NOTE.—Minus sign (-) denotes decrease.

Balance of Payments on Current Account—Monetary Areas, p. 500.—Revised estimates of Australia's regional balance of payments are shown in the following table for the years 1955-56 to 1957-58, together with preliminary estimates for 1958-59.

**BALANCE OF PAYMENTS ON CURRENT ACCOUNT WITH VARIOUS COUNTRIES AND MONETARY AREAS (a): AUSTRALIA.**

(£A.million.)

Particulars.	Gold Production.	Sterling Area.		Dollar Area.			Other Non-Sterling.		Total.
		United Kingdom.	Other.	U.S.A.	Canada.	Other.	O.E.E.C.	Other.(b)	
<b>1955-56.</b>									
Exports f.o.b. ..	..	257.1	131.4	55.0	10.9	9.0	187.5	121.4	772.3
Imports f.o.b. ..	..	-355.3	-128.1	-98.7	-23.3	-4.4	-125.8	-83.9	-819.5
Invisibles (net) ..	15.6	-78.6	-31.7	-45.8	-11.1	-1.1	-15.5	-22.6	-190.8
Balance on Current Account	15.6	-176.8	-28.4	-89.5	-23.5	3.5	46.2	14.9	-238.0
		-205.2		-109.5			61.1		
<b>1956-57.</b>									
Exports f.o.b. ..	..	277.4	175.8	66.1	10.7	9.3	250.8	187.6	977.7
Imports f.o.b. ..	..	-295.9	-123.5	-97.0	-22.2	-4.8	-100.6	-73.5	-717.5
Invisibles (net) ..	16.0	-56.0	-32.0	-51.0	-9.2	-0.8	-13.6	-24.2	-170.8
Balance on Current Account	16.0	-74.5	20.3	-81.9	-20.7	3.7	136.6	89.9	89.4
		-54.2		-98.9			226.5		
<b>1957-58.</b>									
Exports f.o.b. ..	..	221.2	158.8	45.1	14.1	10.8	201.4	160.1	811.5
Imports f.o.b. ..	..	-324.6	-124.7	-105.8	-23.0	-3.6	-115.1	-93.2	-790.0
Invisibles (net) ..	16.3	-59.9	-41.0	-59.8	-10.3	0.1	-17.1	-26.8	-198.5
Balance on Current Account	16.3	-163.3	-6.9	-120.5	-19.2	7.3	69.2	40.1	-177.0
		-170.2		-132.4			109.3		
<b>1958-59.(c)</b>									
Exports f.o.b. ..	..	255.5	152.7	60.7	16.5	10.7	153.6	159.6	809.3
Imports f.o.b. ..	..	-307.1	-131.9	-108.1	-23.1	-4.6	-118.0	-100.8	-793.6
Invisibles (net) ..	16.9	-59.7	-39.2	-69.7	-7.3	0.7	-17.5	-27.2	-203.0
Balance on Current Account	16.9	-111.3	-18.4	-117.1	-13.9	6.8	18.1	31.6	-187.3
		-129.7		-124.2			49.7		

(a) For a list of the countries included in each monetary area, see p. 476. (b) Includes international agencies. (c) Preliminary.

NOTE.—The amounts shown above for imports and exports exclude gold and represent the recorded figures adjusted for balance of payments purposes.

Minus sign (—) denotes debits; other items are credits.

Balance of Payments with the Dollar Area, p. 502.—The following table presents estimates, in revised form, of Australia's balance of payments with the dollar area for the years 1955-56 to 1957-58, and preliminary estimates for 1958-59.

**BALANCE OF PAYMENTS WITH THE DOLLAR AREA: AUSTRALIA.**  
(£A. million.)

Particulars.	1955-56.	1956-57.	1957-58.	1958-59.(a)
<b>CURRENT ACCOUNT.</b>				
<i>Credits with Dollar Area—</i>				
1. Exports f.o.b. . . . .	74.9	86.1	70.0	87.9
2. Transportation . . . . .	2.2	3.1	3.9	4.0
3. Other . . . . .	5.3	6.0	7.4	7.4
Total credits . . . . .	82.4	95.2	81.3	99.3
<i>Debits with Dollar Area—</i>				
4. Imports f.o.b. . . . .	126.4	124.0	132.4	135.8
5. Transportation—				
Freight . . . . .	17.7	19.6	19.6	18.6
Other (incl. Marine Insurance) . . . . .	1.2	1.2	1.6	2.1
6. Investment Income—				
Public Authorities . . . . .	2.7	2.7	2.9	4.1
Undistributed Income . . . . .	19.3	19.5	18.5	18.0
Dividends, Profits, etc. . . . .	11.3	12.9	16.1	14.5
7. Miscellaneous—				
Travel . . . . .	1.6	2.3	4.1	4.1
Business Expenses . . . . .	2.4	2.3	2.3	3.1
Film Rentals . . . . .	2.6	2.6	3.6	2.9
Other . . . . .	6.7	7.0	12.6	20.3
Total debits . . . . .	191.9	194.1	213.7	223.5
8. <i>Balance with Dollar Area</i> . . . . .	-109.5	- 98.9	-132.4	-124.2
9. <i>Other current transactions</i> . . . . .	6.2	12.4	- 2.2	- 13.3
<b>Balance on Current Account</b> . . . . .	<b>-103.3</b>	<b>- 86.5</b>	<b>-134.6</b>	<b>-137.5</b>
<b>INVESTMENT AND FINANCING ACCOUNT.</b>				
10. Gold sales to the United Kingdom . . . . .	..	25.0	..	..
11. Net purchases of dollars from the United Kingdom . . . . .	40.2	23.2	70.3	76.7
12. Increase (-) in Aust. dollar balances . . . . .	- 1.8	- 4.9	- 0.3	- 4.8
13. Official loans—				
I.B.R.D. . . . .	18.0	3.1	13.2	2.2
Other . . . . .	8.6	0.1	9.2	16.4
14. I.M.F. and I.F.C. . . . .	..	- 1.0	..	..
15. Identified private capital—				
Undistributed income (net) . . . . .	19.4	19.6	18.7	18.0
Other . . . . .	13.3	7.0	5.2	(b)
16. Balancing Item . . . . .	5.6	14.4	18.3	29.0
<b>Balance on Investment and Financing Account</b> . . . . .	<b>103.3</b>	<b>86.5</b>	<b>134.6</b>	<b>137.5</b>

(a) Preliminary.

(b) Not available, included in balancing item.

NOTE.—In current account, - indicates debit items. In investment account, - indicates net decreases in liabilities or net increases in assets.

## CHAPTER XIV.—TRANSPORT AND COMMUNICATION.

## PART I.—TRANSPORT.

## F. MOTOR VEHICLES.

**Motor Vehicle Registrations, p. 537.**—Motor vehicles registered at 30th June, 1959, and new motor vehicles registered during 1958–59 were as follows:—

## MOTOR VEHICLES: REGISTRATIONS, 1958-59.

State or Territory.	Number of Motor Vehicles Registered at 30th June, 1959.(a)				Number of New Motor Vehicles Registered, 1958-59.(a)			
	Motor Cars.(b)	Com-mercial Vehicles.(c)	Motor Cycles.	Total.	Motor Cars.(b)	Com-mercial Vehicles.(c)	Motor Cycles.	Total.
New South Wales ..	589,692	290,695	32,575	912,962	58,302	34,357	2,690	95,349
Victoria(d) ..	599,292	166,577	23,489	789,358	56,337	14,620	2,234	73,191
Queensland ..	222,189	142,332	19,258	383,779	20,956	11,278	1,606	33,840
South Australia ..	182,813	67,538	17,700	268,051	16,760	6,110	1,095	23,965
Western Australia ..	118,112	67,830	13,411	199,353	10,389	5,140	2,071	17,600
Tasmania ..	60,109	24,939	3,606	88,654	5,416	2,059	176	7,651
Northern Territory ..	3,499	4,260	714	8,473	391	352	37	780
Aust. Capital Territory ..	10,332	3,319	421	14,072	1,630	474	83	2,187
<b>Total ..</b>	<b>1,786,038</b>	<b>767,490</b>	<b>111,174</b>	<b>2,664,702</b>	<b>170,181</b>	<b>74,390</b>	<b>9,992</b>	<b>254,563</b>

(a) Excludes Defence Service vehicles, trailers, road tractors, etc., and dealer's plates. (b) Includes taxis and hire cars. (c) Includes utilities, panel vans, lorries, omnibuses and station wagons. (d) Registration in Victoria is according to purpose of use and not type of vehicle; consequently, motor car registrations are overstated by the inclusion of commercial vehicles registered for private use.

## PART II.—COMMUNICATION.

## A. POSTS; TELEGRAPHS; TELEPHONES; CABLE AND RADIO COMMUNICATION.

## § 5. Cable and Radio Communication.

**Radio-communication Stations Authorized, p. 560.**—The following radio-communication stations were authorized in Australia and the External Territories at 30th June, 1959:—Transmitting and receiving stations—Fixed—aeronautical, 108 (25); services with other countries, 88 (12); outpost, 1,507 (360); other, 742 (72); Land—aeronautical, 98 (16); land mobile services, 2,188 (8); harbour mobile services, 71 (-); coast, 93 (14); special experimental, 147 (8); Mobile—aeronautical, 444 (-); land mobile services, 19,913 (56); harbour mobile services, 361 (18); outpost, 859 (34); ship, 2,131 (137); Amateur, 3,845 (75). In addition, there were 379 fixed and 55 mobile stations for the purpose of receiving only. The figures in parentheses refer to the External Territories and are included in the totals preceding them.

## B. BROADCASTING AND TELEVISION.

## § 2. Broadcasting.

**Broadcasting Stations, p. 563.**—The following table shows the number of broadcasting stations in operation at 30th June, 1959:—

## BROADCASTING STATIONS, 30th JUNE, 1959.

Type of Station.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Papua and New Guinea.	Total.
National—										
Medium Frequency ..	16	5	12	8	7	4	2	2	1	57
High Frequency ..	1	3	2	..	2	..	..	..	1	9
Commercial ..	37	20	20	8	14	8	..	1	..	108

## § 4. Licences, etc.

**Broadcast Listeners' and Television Viewers' Licences, p. 568.**—Broadcast listeners' licences in force at 30th June, 1959, were as follows:—New South Wales, 827,453; Victoria 605,340; Queensland, 337,760; South Australia, 247,468; Western Australia, 169,272; Tasmania, 76,419; Australia, 2,263,712. Figures for the Northern Territory and the Australian Capital Territory have been included with those for South Australia and New South Wales respectively.

Television viewers' licences in force at 30th June, 1959, were as follows:—New South Wales, 300,871; Victoria, 270,073; Queensland, 360; South Australia, 6,124; Tasmania, 74; Australia, 577,502.

## CHAPTER XVIII.—WELFARE SERVICES.

## A. COMMONWEALTH SOCIAL SERVICE BENEFITS.

## § 2. Commonwealth Expenditure on Social and Health Services.

**States, p. 668.**—The following table shows particulars of payments of social and health services in each State during 1958–59.

COMMONWEALTH EXPENDITURE ON SOCIAL AND HEALTH SERVICES,  
1958-59.

(£'000.)

Service.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Over-seas.	Total.
<b>Social Benefits—</b>										
Age and Invalid Pensions	53,654	31,645	19,569	11,575	8,622	4,218	54	162	72	129,571
Child Endowment	24,293	18,369	10,339	6,308	5,198	2,502	201	318	12	67,540
Commonwealth Rehabilitation Service	177	203	80	97	93	20	..	..	..	670
Funeral Benefits	140	92	48	31	23	11	..	1	..	346
Maternity Allowances	1,266	1,020	546	328	267	139	11	20	2	3,599
Sickness Benefits	920	509	346	183	159	70	2	7	..	2,196
Special Benefits(a)	142	187	89	37	23	18	..	1	..	497
Tuberculosis Allowances	364	224	206	132	78	59	..	..	..	1,063
Unemployment Benefits	2,422	1,224	1,154	362	655	134	1	7	..	5,959
Widows' Pensions	4,275	2,545	1,800	947	800	371	7	23	9	10,777
<b>National Health Services—</b>										
Hospital Benefits	6,350	3,426	1,972	1,225	1,285	477	39	28	..	14,802
Medical Benefits	3,384	1,872	824	796	700	204	..	..	..	7,780
Medical Benefits for Pensioners	1,710	932	482	323	259	92	..	8	..	3,806
Nutrition of Children	1,190	783	475	236	182	181	3	19	..	3,069
Pharmaceutical Benefits	7,421	5,265	2,372	1,556	1,222	503	..	(b) 116	..	18,455
Pharmaceutical Benefits for Pensioners	1,138	525	394	228	176	56	..	..	..	2,517
Tuberculosis Campaign maintenance payments	1,765	1,046	799	429	558	170	..	20	..	4,787
Miscellaneous	14	41	102	9	15	19	12	(c) 556	..	768
<b>Total</b>	<b>110,625</b>	<b>69,908</b>	<b>41,597</b>	<b>24,802</b>	<b>20,315</b>	<b>9,244</b>	<b>330</b>	<b>1,286</b>	<b>95</b>	<b>278,202</b>

(a) Includes special benefits to migrants in reception and training centres. (b) Includes private hospitals, Canberra Community Hospital, Bush Nursing Centres, etc. (c) Includes £403,911 for the production of poliomyelitis vaccine and £70,000 for running expenses of the Blood Fractionation Plant at the Commonwealth Serum Laboratories, Parkville, Victoria, £18,969 for Pooled Human Serum and Anti-Rh Serum, £6,055 for Public Health Measures (inoculation of government employees against influenza) and £34,538 for Home Nursing Service.

§ 3. Age and Invalid Pensions, § 4. Child Endowment, § 7. Maternity Allowances, § 8. Unemployment, Sickness and Special Benefits, § 9. Widows' Pensions.

General, pp. 669-682.—The following table gives a summary of age, invalid and widows' pensions, maternity allowances, child endowment, and unemployment, sickness and special benefits for the year 1958-59:—

## SOCIAL SERVICES: SUMMARY, 1958-59.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Age Pensioners at end of year—</b>									
Males .. .. .	66,993	37,232	28,442	14,933	12,494	4,957	105	219	165,375
Females .. .. .	144,667	90,920	46,643	33,037	22,135	10,477	99	436	348,414
Persons .. .. .	211,660	128,152	75,085	47,970	34,629	15,434	204	655	513,789
<b>Invalid Pensioners at end of year—</b>									
Males .. .. .	17,042	12,319	8,479	3,130	3,368	1,591	40	45	46,014
Females .. .. .	15,285	8,813	6,918	2,684	2,573	1,479	24	63	37,839
Persons .. .. .	32,327	21,132	15,397	5,814	5,941	3,070	64	108	83,853
<b>Maternity Allowances—</b>									
Claims paid during year	80,289	62,771	34,266	20,541	16,594	8,608	682	1,276	225,122
<b>Child Endowment at end of year—</b>									
Family claims in force	543,246	396,476	207,998	136,139	106,752	50,838	3,255	6,576	1,451,516
Endowed children ..	1,141,012	851,489	478,098	296,849	241,552	117,979	7,283	14,774	3,149,516
<b>Widows' Pensions at end of year—</b>									
Pensions in force ..	19,528	12,141	8,077	4,343	3,833	1,663	31	90	49,706
Class "A" pensions in force <sup>(b)</sup> ..	8,621	5,337	4,028	1,863	1,515	865	18	49	22,296
<b>Unemployment, Sickness and Special Benefits—</b>									
<b>Persons on benefit at end of year—</b>									
<b>Unemployment Benefit—</b>									
Males .. .. .	8,554	4,041	3,447	636	2,500	502	2	9	19,691
Females .. .. .	3,508	1,972	1,030	696	439	168	3	21	7,837
Persons .. .. .	12,062	6,013	4,477	1,332	2,939	670	5	30	27,528
<b>Sickness Benefit—</b>									
Males .. .. .	2,573	1,454	1,026	480	527	188	2	12	6,262
Females .. .. .	992	518	353	157	122	64	1	4	2,211
Persons .. .. .	3,565	1,972	1,379	637	649	252	3	16	8,473
<b>Special Benefit—(c)</b>									
Males .. .. .	218	108	129	53	35	17	1	..	561
Females .. .. .	514	608	281	112	93	92	..	3	1,703
Persons .. .. .	732	716	410	165	128	109	1	3	2,264
<b>Total—</b>									
Males .. .. .	11,345	5,603	4,602	1,169	3,062	707	5	21	26,514
Females .. .. .	5,014	3,098	1,664	965	654	324	4	28	11,751
Persons .. .. .	16,359	8,701	6,266	2,134	3,716	1,031	9	49	38,265
<b>Admissions to Benefit—</b>									
<b>Unemployment Benefit—</b>									
Males .. .. .	43,417	17,865	31,529	6,211	13,298	2,866	52	188	115,426
Females .. .. .	12,154	6,636	5,434	2,516	1,932	846	16	56	29,590
Persons .. .. .	55,571	24,501	36,963	8,727	15,230	3,712	68	244	145,016
<b>Sickness Benefit—</b>									
Males .. .. .	17,113	9,803	7,775	4,036	4,125	1,621	52	113	44,638
Females .. .. .	6,105	3,485	2,055	1,023	925	409	13	27	14,042
Persons .. .. .	23,218	13,288	9,830	5,059	5,050	2,030	65	140	58,680
<b>Special Benefit—(c)</b>									
Males .. .. .	752	342	665	174	69	49	3	5	2,059
Females .. .. .	607	959	177	110	81	50	..	16	2,000
Persons .. .. .	1,359	1,301	842	284	150	99	3	21	4,059
<b>Total—(c)</b>									
Males .. .. .	61,282	28,010	39,969	10,421	17,492	4,536	107	306	162,123
Females .. .. .	18,866	11,080	7,666	3,649	2,938	1,305	29	99	45,632
Persons .. .. .	80,148	39,090	47,635	14,070	20,430	5,841	136	405	207,755
<b>Benefits paid—</b>									
<b>Unemployment</b> ..	£ 2,422,069	1,224,299	1,153,218	362,402	654,387	134,870	1,058	7,172	5,959,475
<b>Sickness</b> .. .. .	£ 920,460	508,980	346,383	182,787	159,230	69,873	1,740	7,073	2,196,526
<b>Special (d)</b> .. .	£ 141,950	186,997	88,900	36,998	23,110	17,669	36	648	496,308
<b>Total (d)</b> .. .	£ 3,484,479	1,920,276	1,588,501	582,187	836,727	222,412	2,834	14,893	8,652,309

(a) Includes claims paid overseas. (b) Pensions paid to widows who maintain at least one child under 16 years of age. (c) Excludes migrants. (d) Includes payments to migrants.

## CHAPTER XX.—PRIVATE FINANCE.

## A. CURRENCY.

## § 2. Coinage.

**Issues of Australian Coins, p. 729.**—The net issues of Australian coins to 30th June, 1959, were:—silver, £37,512,000; bronze, £3,080,000; total, £40,592,000.

## § 3. Notes.

**The Australian Note Issue, p. 731.**—The average value of notes in circulation for the year 1958–59 was £398,278,000. This amount was distributed in denominations as follows:—10s., £11,507,000; £1, £68,919,000; £5, £177,931,000; £10, £139,205,000; £20, £3,000; £50, £37,000; £100, £42,000; and £1,000, £634,000. The amount held by the banks was £46,777,000 and by the public, £351,501,000.

## B. BANKING.

## § 1. Cheque-Paying Banks.

**Commonwealth Bank, p. 738.**—The average liabilities of the Central Banking Business (including Note Issue Department) of the Commonwealth Bank for the year ended June, 1959, amounted to £939,376,000. Capital and Reserve Funds amounted to £26,437,000; Notes on Issue to £396,019,000; Special Accounts of Trading Banks to £259,865,000; Other Deposits of Trading Banks to £24,189,000; Other Liabilities to £232,866,000.

Particulars of the average assets were as follows:—Gold and Balances held abroad; £411,509,000; Australian Coin, £2,182,000; Cheques and Bills of other Banks, £4,094,000; Government and Other Securities (including Treasury Bills), £469,064,000; Bills Receivable and Remittances in Transit, £4,707,000; and Other Assets, £47,820,000.

**Commonwealth Trading Bank, p. 742.**—The average liabilities in Australia of the Commonwealth Trading Bank for the year ended June, 1959, were £248,858,000. Of this amount, Deposits not bearing interest amounted to £159,061,000; Deposits bearing interest to £67,739,000; Balances due to other Banks to £417,000; Other Liabilities to £21,641,000.

The average assets in Australia, £245,657,000, included Cash and Cash Balances £11,285,000; Special Deposit Account with Central Bank, £36,458,000; Balances with other Banks, £1,590,000; Treasury Bills, £4,148,000; Other Commonwealth and State Government Securities, £56,673,000; Other Securities, £3,714,000; Loans, Advances and Bills Discounted, £122,529,000; Other Assets, £9,260,000.

**Private Trading Banks, p. 743.**—Average liabilities in Australia of the Private Trading Banks for the year ended June, 1959, were £1,400,580,000. Interminable Deposits or Deposit Stock amounted to £6,000; Deposits not bearing interest to £1,007,370,000; Deposits bearing interest to £368,455,000; Notes in Circulation to £157,000; Balances due to other Banks to £4,119,000; Other Liabilities to £20,473,000.

Average assets in Australia amounted to £1,426,706,000. These comprised Cash and Cash Balances. £58,184,000; Special Accounts with Commonwealth Bank, £222,801,000; Balances with other Banks, £18,738,000; Treasury Bills, £37,916,000; Other Commonwealth and State Government Securities, £193,343,000; Other Securities, £16,677,000; Loans, Advances and Bills Discounted, £807,139,000; All Other Assets, £71,908,000.

**Classification of Advances within Australia—Commonwealth Trading Bank and Private Trading Banks, p. 747.**—Advances within Australia at the end of December, 1958, dissected by industries were:—Resident Borrowers: Business Advances—Agriculture, Grazing and Dairying, £231,504,000; Manufacturing, £174,304,000; Transport, Storage and Communication, £15,618,000; Finance, £53,780,000; Commerce, £180,846,000; Building and Construction, £26,726,000; Other Business and Services, £58,981,000; Unclassified, £5,430,000; Total Business advances, £747,189,000; Advances to Public Authorities, £18,195,000; Personal advances, £142,895,000; Advances to Non-Profit Organizations, £15,843,000; Total Resident Borrowers, £924,122,000; Total Non-Resident Borrowers, £196,000; Total advances, £924,318,000.

**Clearing House Returns, p. 750.**—The average weekly bank clearings in each capital city for the year ended June, 1959, were as follows:—Sydney, £135,387,000; Melbourne, £128,870,000; Brisbane, £27,227,000; Adelaide, £25,299,000; Perth, £15,786,000; Hobart, £4,893,000; Total, £337,462,000.

**Debits to Customers' Accounts—All Cheque-paying Banks, p. 750.**—The average weekly debits to customers' accounts in each State for the year 1958–59 for all cheque-paying banks (excluding debits to accounts of Australian Governments in capital cities) were as follows:—New South Wales, £248,904,000; Victoria, £224,729,000; Queensland, £70,253,000; South Australia, £46,180,000; Western Australia, £30,731,000; Tasmania, £13,830,000; Australian Capital Territory, £1,979,000; Total, £636,606,000.

## § 2. Savings Banks.

**All Savings Banks, pp. 753–4.**—The numbers of operative accounts in the several States at 30th June, 1959, were:—New South Wales, 2,879,000; Victoria, 2,565,000; Queensland, 1,080,000; South Australia, 889,000; Western Australia, 527,000; Tasmania, 299,000; Northern Territory, 14,000 and Australian Capital Territory, 29,000; Total, 8,282,000. The amounts on deposit in the several States at 30th June, 1959, were:—New South Wales, £488,273,000; Victoria, £458,454,000; Queensland, £166,653,000; South Australia, £157,152,000; Western Australia, £71,499,000; Tasmania, £42,462,000; Northern Territory, £2,239,000 and Australian Capital Territory, £4,600,000; Total, £1,391,332,000. Total excess of deposits over withdrawals during 1958–1959 was £59,182,000 and interest added was £35,361,000.

## D. INSURANCE.

### § 2. Life Assurance.

**Life Assurance, p. 765.**—The following is a summary of the life assurance business transacted in Australia during 1958 (figures for 1957 in parentheses) compiled from monthly returns collected from the 27 (24) companies registered under the Life Insurance Act 1945–1953, and excluding the Government Insurance Office of New South Wales and the Queensland State Government Insurance Office which operate only within their respective States. Particulars shown are therefore not entirely comparable with those in Chapter XX., which are derived from annual returns and include business of the State Government Offices.

Ordinary Department and Industrial Department, respectively:—New Policies issued in Australia—Number, 297,674 (303,355), 198,611 (209,153); Sum Assured, £482,263,000 (£436,163,000), £32,710,000 (£33,383,000); Policies Matured or Otherwise Discontinued in Australia—Number, 182,088 (182,173), 287,039 (290,851); Sum Assured, £154,221,000 (£130,386,000), £27,304,000 (£26,272,000). Particulars of annuities are excluded.

Premium receipts of Ordinary and Industrial Departments in Australia in 1958 amounted, respectively, to £91,267,000 (£82,912,000) and £15,305,000 (£15,120,000); Claims, etc., paid amounted to £35,112,000 (£31,846,000) and £10,397,000 (£10,781,000) respectively. Particulars of annuities are included.

## CHAPTER XXI.—PUBLIC FINANCE.

### A. COMMONWEALTH FINANCE.

Consolidated Revenue Fund, pp. 784 and 793.—The table below shows details of revenue and expenditure for the year 1958–59:—

#### COMMONWEALTH CONSOLIDATED REVENUE FUND: REVENUE AND EXPENDITURE, 1958–59.

(£'000.)

Revenue.		Expenditure.	
Item.	Amount.	Item.	Amount.
<i>Taxation—</i>		Defence Services (a) .. ..	118,080
Customs .. ..	71,671	War and Repatriation Services .. ..	128,163
Excise .. ..	236,254	Subsidies and Bounties .. ..	17,294
Sales Tax .. ..	143,617	Departmental .. ..	130,404
Land Tax .. ..	..	National Welfare Fund—	
Income Taxes .. ..	608,660	Expenditure on Social Services .. ..	278,227
Pay-roll Tax .. ..	49,619		
Estate Duty .. ..	13,309	<i>Business Undertakings—</i>	
Other Taxes .. ..	10,168	Postmaster-General's Department .. ..	100,480
<i>Total</i> .. ..	1,133,298	Broadcasting and Television Services .. ..	8,370
		Railways .. ..	4,378
<i>Business Undertakings—</i>		<i>Total</i> .. ..	113,228
Postmaster-General's Department .. ..	103,467	Territories .. ..	20,616
Broadcasting and Television Services .. ..	8,618		
Railways .. ..	4,811	<i>Capital Works and Services—</i>	
<i>Total</i> .. ..	116,896	Defence Services .. ..	34,985
		Business Undertakings .. ..	39,042
Territories .. ..	3,189	Other .. ..	93,305
Other Revenue .. ..	42,667	<i>Total</i> .. ..	167,332
		Payments to or for States .. ..	286,591
		Loan Consolidation and Investment Reserve .. ..	27,947
		Other Expenditure .. ..	8,168
<b>Grand Total</b> .. ..	<b>1,296,050</b>	<b>Grand Total</b> .. ..	<b>1,296,050</b>

(a) In addition, £37,308,000 was spent from Loan Fund on Defence Services—General Services, Works, Armaments, etc.

## C. COMMONWEALTH AND STATE FINANCE.

Revenue and Expenditure, p. 829.—Preliminary information relating to Commonwealth and State revenue and expenditure during 1958–59 is given below.

COMMONWEALTH AND STATE REVENUE AND EXPENDITURE, 1958–59.  
(£'000.)

Government of—	Consolidated Revenue Fund.			Loan Fund— Net Expenditure on Works and Services.
	Revenue.	Expenditure.	Surplus (+) or Deficit (—).	
New South Wales .. .. .	(a) 240,890	(a) 240,845	+ 45	54,496
Victoria .. .. .	151,250	153,796	— 2,546	44,449
Queensland .. .. .	99,007	100,198	— 1,191	21,024
South Australia .. .. .	68,030	69,057	— 1,027	24,159
Western Australia .. .. .	60,068	61,753	— 1,685	16,760
Tasmania .. .. .	21,851	22,759	— 908	12,975
<i>Six States</i> .. .. .	641,096	648,408	— 7,312	173,863
<i>Commonwealth</i> .. .. .	1,249,050	1,249,050	..	(c) 48,813
<b>Grand Total—Unadjusted</b> .. .. .	1,937,146	1,944,458	— 7,312	222,676
<b>Adjusted(b)</b> .. .. .	1,686,920	1,694,232	— 7,312	222,676

(a) Represents the combined transactions of the Consolidated Revenue Fund and the Business Undertakings—Railways, Tramways and Omnibuses and Sydney Harbour Section of the Maritime Services Board—included in the annual Budget Papers. Adjustments have been made to exclude duplications. (b) To avoid duplication in aggregating particulars for the Commonwealth and States, the grand totals have been adjusted to exclude State payments to the Commonwealth in respect of pay-roll tax and Commonwealth payments to the States included in State Consolidated Revenue Funds in respect of interest on State debts, special grants, uniform taxation, special financial assistance, grants to universities, tuberculosis, capital expenditure and National Welfare payments. There are other relatively minor payments for which adjustments have not been made and the adjusted figures are therefore still slightly overstated. (c) Excludes expenditure of £37,308,000 on Defence Services—General Services, Works, Armaments, etc.

## D. COMMONWEALTH AND STATE PUBLIC DEBT.

## § 3. Commonwealth and State Public Debt Outstanding.

Public Debt and Annual Interest Payable, pp. 833–4.—The following table shows details of the public debt of the Commonwealth and States and the annual interest payable thereon at 30th June, 1959.

## COMMONWEALTH AND STATE PUBLIC DEBT AND ANNUAL INTEREST PAYABLE AT 30th JUNE, 1959.

Particulars.	Maturing in—					Total. £'000.
	Australia. £A'000.	London. £Stg.'000.	New York. £'000.(a)	Switzer- land. £'000.(b)	Canada. £'000.(a)	
<b>DEBT.</b>						
<i>Commonwealth—</i>						
War (1914–18) .. .. .	89,800	7,533	..	..	..	97,333
War (1939–45) .. .. .	1,043,597	5,655	..	..	..	1,049,252
Works and other purposes	362,957	50,851	73,794	2,842	12,251	502,695
<i>Total</i> .. .. .	1,496,354	64,039	73,794	2,842	12,251	1,649,280
<i>States</i> .. .. .	2,093,752	267,866	30,003	..	..	2,391,621
<b>Grand Total</b> .. .. .	3,590,106	331,905	103,797	2,842	12,251	4,040,901
<b>ANNUAL INTEREST PAYABLE.</b>						
Commonwealth .. .. .	45,700	2,327	3,321	114	475	51,937
States .. .. .	84,746	9,859	1,259	..	..	95,864
<b>Grand Total</b> .. .. .	130,446	12,186	4,580	114	475	147,801

(a) £ payable in dollars which have been arbitrarily converted to £ at the rate of \$4.8665 to £1. (b) Loan raised in Switzerland has been converted to £ at the rate of 1,000 Swiss francs to £102 1s. 10d. as provided in Loan Agreement.

### § 4. Commonwealth Loan Raisings.

Loans Raised, pp. 847.—Particulars of loans raised by the Commonwealth between 1st July, 1958, and 30th June, 1959, are given in the following table.

COMMONWEALTH LOANS RAISED, 1958-59.(a)

Month of Raising.	Where Raised.	Amount Invited.	Amount Subscribed.	Rate of Interest. (b)	Year of Maturity.	Purpose.
		£'000.	£'000.	%		
1958-59—						
October, 1958	Australia	30,000	{ 13,078 4,748 18,971	{ 4 4½ 5	{ 1960 1967 1974	State purposes, £36,796,000 Advances for housing £1,000
October, 1958	Australia	218,198	{ 54,895 24,543 75,647	{ 4 4½ 5	{ 1960 1967 1974	Conversion
October, 1958	London	15,000	{ 11,332 15,000	{ 4-5 5½	{ 1966 1978	State purposes, £12,440,000 Advances for housing, £2,560,000
October, 1958	New York	5,137	5,137	5	1978	State purposes, £4,261,000 Advances for housing, £876,000
February, 1959	Australia	25,000	{ 35,945 3,996 20,252	{ 4 4½ 5	{ 1961 1967 1974	State purposes, £60,192 Advances for housing, £1,000
March, 1959	London	20,000	{ 10,000 10,000	{ 5½ 5½	{ 1973 1979	Conversion
May, 1959	Australia	35,000	{ 14,139 3,309 33,103	{ 4 4½ 5	{ 1962 1968 1979	State purposes, £29,052,000 Advances for housing, £21,499,000
May, 1959	Australia	108,189	{ 50,951 21,563 16,396	{ 4 4½ 5	{ 1962 1968 1979	Conversion
June, 1959	Australia	10,000	{ 3,781 10,000	{ 4-5 5	{ 1966 1979	War Repatriation and Rehabilitation, £6,547,000 Advances for housing, £3,453,000

(a) In addition, during 1958-59, \$16,830,000 was drawn against loans made available by the International Bank for Reconstruction and Development and \$11,961,000 and \$1,560,000 respectively were raised in New York for Qantas Empire Airways. In the same year \$3,000,000 was raised in New York for the Australian National Airways Commission. (b) Australian loans bearing interest at 5 per cent. were issued at par and those at other rates were issued at prices ranging from par to £99 7s. 6d. London cash loans raised in 1958-59 were issued at £98 and conversion loans at £99. The New York loan in 1958-59 was issued at £97 10s.

In addition, between October, 1958 and April, 1959, the cash proceeds raised in respect of Special Bonds Series "A" totalled £22,037,000. During that period continuous subscriptions were open for these Bonds which are redeemable at any time after 1st July, 1959, at prices commencing at par and increasing to a premium of £3 per cent. if the bonds are held to maturity on 1st January, 1966. Interest is 4 per cent. for approximately the first two years, 4½ per cent. for the next two years and 5 per cent. for the next three years.

Continuous subscriptions were invited to Special Bonds Series "B" as from April, 1959, and subscriptions up to the end of 1958-59 totalled £5,105,000. The terms of issue of the two series of Special Bonds are similar except that interest for Series "B" bonds for the third year is 4 per cent. instead of 4½ per cent. Series "B" bonds are redeemable at any time after 1st April, 1960, and mature on 1st October, 1966.

The maximum combined holding for each person in Series "A" and "B" is £5,000.

## CHAPTER XXIII.—PASTORAL PRODUCTION.

Livestock Numbers, p. 929.—The following table shows, for each State, the numbers of livestock at 31st March, 1959.

## LIVESTOCK NUMBERS, 31st MARCH, 1959.(a)

('000.)

—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Horses ..	214	92	239	33	41	12	37	1	669
Cattle ..	3,684	2,651	6,884	576	1,000	375	1,100	9	16,279
Sheep ..	67,936	26,925	22,148	15,634	16,215	3,536	22	272	152,688
Pigs ..	358	253	400	98	116	69	3	..	1,297

(a) Preliminary, subject to revision.

Production of Meat, pp. 936, 942, 975.—The following table shows for each State the production of meat during 1958–59.

## PRODUCTION OF MEAT, 1958–1959.(a)

('000 Tons Bone-in Weight.)

—	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
Beef and Veal ..	269,856	187,108	330,041	41,751	44,397	20,666	5,291	2,165	901,275
Mutton and Lamb	150,676	184,747	27,733	54,118	39,340	16,785	90	1,254	474,743
Total Meat (incl. Pigmeats) ..	453,527	396,094	381,318	104,382	93,792	41,404	5,462	3,658	1,479,637

(a) Subject to revision.

## CHAPTER XXIV. FARMYARD, DAIRY AND BEE PRODUCTS.

Principal Farmyard and Dairy Products, pp. 960, 975.—Particulars at the total production of these products in each State during 1958–59 are shown below:—

## PRINCIPAL FARMYARD AND DAIRY PRODUCTS, 1958–59.(a)

—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
Total Whole Milk								
( <sup>'000</sup> gals.)	330,003	579,913	258,232	82,177	52,605	65,766	968	1,369,664
Butter(b) ..	39,210	88,854	41,352	7,046	6,310	11,049	4	193,825
Cheese(b) ..	5,041	17,296	8,119	11,167	1,157	361	..	43,141
Pork ..	17,272	12,212	8,209	4,094	4,275	2,731	239	49,032
Bacon and Ham								
(tons cured wt.)	11,561	8,844	11,276	3,249	2,950	900	..	38,780

(a) Subject to revision. (b) Factory and farm production.

## CHAPTER XXVII.—MINERAL INDUSTRY.

## § 1. The Mineral Wealth of Australia.

Quantity and Value of Production, pp. 1012–1014.—In the table hereunder particulars are given of the quantity and value of production in Australia of the principal minerals during the year 1958:—

## MINERAL PRODUCTION: QUANTITIES AND VALUES, AUSTRALIA, 1958.(a)

## METALLIC MINERALS.

Year.	Principal Contents of Metallic Minerals Produced.							Total Value of Output of Metal Mining.
	Copper.	Gold.	Iron.	Lead.	Silver.	Tin.	Zinc.	
	Tons.	Fine oz.	'000 tons.	Tons.	'000 fine oz.	Tons.	Tons.	£'000.
1958 .. ..	72,568	1,100,404	2,544	327,368	16,270	2,237	263,044	70,955

## NON-METALLIC AND FUEL MINERALS.

Year.	Quantities Produced.						Total Value of Output of Non-metal. and Fuel Mining.
	Coal.		Gypsum.	Limestone. (b)	Mica.	Salt.	
	Black.	Brown.					
	'000 tons.	'000 tons.	Tons.	'000 tons.	lb.	Tons.	£'000.
1958 .. ..	20,414	11,644	504,938	5,490	93,999	429,534	66,991

(a) Subject to revision.

(b) Excludes limestone used as a construction material.

## 2. Gold, § 3. Silver, Lead, Zinc, § 4. Copper, § 5. Tin, pp. 1017–1030.

Smelter and refinery production of the principal metals in Australia during the year 1958 is shown below.

## SMELTER AND REFINERY PRODUCTION OF PRINCIPAL METALS: AUSTRALIA 1958.

Year.	Refined Gold.	Refined Silver. (a)	Refined Lead. (a)	Lead Content of Lead Bullion Produced for Export. (a)	Refined Zinc. (a)	Refined Copper. (a)	Refined Tin. (a)
	'000 fine oz.	'000 fine oz.	Tons.	Tons.	Tons.	Tons.	Tons.
1958 .. ..	1,207	9,101	191,822	57,171	114,773	43,276	2,121

(a) Source: Bureau of Mineral Resources.



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